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TANIS.

PART II.

LONDON:
PRINTED BY GILBERT AND RIVINGTON, LIMITED,
ST. JOHN'S HOUSE, CLERKENWELL ROAD.

TANIS.

PART II.

NEBESHEH (AM)

AND

DEFENNEH (TAPHANHES).

BY

W. M. FLINDERS PETRIE.

WITH CHAPTERS BY

A. S. MURRAY AND F. LL. GRIFFITH.

FOURTH MEMOIR OF

THE EGYPT EXPLORATION FUND.

PUBLISHED BY ORDER OF THE COMMITTEE.

LONDON :
TRUBNÈR & CO., 57 & 59, LUDGATE HILL, E.C.

1888.

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BY F. LL. GRIFFITH.

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TANIS.

PART II.



1. As these pages are a continuation of the description of the monuments of Tanis, which was begun in Part I., there is no need of any prefatory remarks before resuming the chronological descriptions, which it may be remembered were laid aside in the midst of the monuments of Ramessu II. The numbering of the inscriptions here is continuous from Part I. The only work that I have done at Tanis, since writing the first part of this memoir, is the further clearing of the two stone-lined wells, of which an account will here be given.

At the south end of the line of early statues lie two altars or tables of offerings some little way apart (Plan, 105 and 115); they have the usual representations of cakes, vases, vegetables, &c., upon them, and the inscriptions Nos. 66 and 67; the interest of these is in the dedications, which are almost the only references to other places found at San, one naming Tahuti, lord of Hermopolis, and the other Menthu, lord of Thebes. Both are cut in a very hard white limestone, breaking with a splintering fracture, and No. 115 is considerably broken.

On either side of the temple stood a large shrine of a deep form, cut in yellow sandstone (Plan, 80, and 81), see pl. xvi. 6; the southern shrine is broken into many pieces and several parts are missing, but the northern shrine has lost only a part of one side, and one block of this part still lies near to it. These shrines seem to have been placed facing each other on either hand of the axial roadway, and were each flanked on either

side by two of the large granite obelisks; while beyond these again stood on one side the sandstone colossi of Ramessu II., and on the other the long line of early statues. Each shrine had three seated deities, carved all in the solid block, at the back of its recess; and these seem to be the same in both shrines, apparently Amen, with Ra on his left, and Tum on his right. The deities represented in the scenes of offering (inscrip. 68), however, are Khepera, Tum, and Haremkhuti on the sides, and Seb and Shu on the back. A similar shrine, but with a sphinx carved in it, was found at Tell-el-Maskhuta, and is now at Ismailiyeh (pl. xvi. 5).

The great series of granite stelæ at San have suffered severely; every one of them having been used up for building material in later times, and all but one being broken. Their loss, however, is not so much due to this injury as to the severe weathering, which had before they were thus used up, scaled off the surface from most of them. For a statement of their dimensions see Part I., sect. 24, where the plan number of the largest is misprinted 161 for 164. The inscriptions, so far as they are legible, are given here in Nos. 69 to 82. No 78 *bis* I had supposed might be the missing piece of No. 78, but on comparing them together this is seen not to be the case for several reasons. The upper part of stele 196 (Plan) may be seen in the foreground of the photograph, pl. xiv. 5, in Part I. The fragments (inscripts. 83 to 86) appear to belong to large monuments such as

obelisks; 83 and 84 are probably parts of one block, by the style and the thickness of the pieces.

2. Of the architraves of the temple (inscrip. 87 to 93) not much remains; of the large ones but four, and two smaller lintel blocks. These architraves are a double cubit square (41 to 42 in.); but No. 25, used up in building the pylon, is 48 in. wide,—perhaps it belonged to the pylon of Ramessu, and not to the temple. The unfinished figures in inscrip. 89 show the incompleteness of the work as in parts of the Great Hall at Karnak. Of the sanctuary walls (described in Part I., sect. 23) but few pieces bear any continuous inscriptions (Nos. 94 to 101); the general appearance of them may be seen by the block at the right hand of the photograph, pl. xiv. 5, in Part I. The block inscrip. 94 is curious, as having a piece of disused sculpture on the joint surface; sculpture which from its style can hardly be placed to any period before Ramessu II. This is another case of Ramessu II. cutting up his own work, like the change in the obelisk 77 (Plan), which was noticed in Part I., sect. 31. A third instance, perhaps, will be seen in the inscription 144, noticed below.

The great columns of the avenue from the pylon (inscrip. 102 to 108) have been in course of appropriation apparently by Sheshonk III., in connection with his rebuilding of the pylon (Part I., sect. 19). But they have suffered even more than this apparently, for the cartouches in the first two lines of inscrip. 102 have been entirely cut out, and then reinserted in their present form, before the erasure of the half cartouche by Sheshonk III. We might think that this was another freak of Ramessu himself, only he had no other standard cartouches to insert, the cartouche form and arrangement being scarcely ever varied. No later king would, however, have the piety to insert a predecessor's cartouches, and so this must be credited to some vagary of the sculptors. The scenes around the lower part have been intentionally cut out,

and specially the small cartouches, leaving the titles. The object of this again is not clear, as an appropriator would have used the previous figures without any demur; and a mere defacer would have cut away the titles as well. We see here the only mention of the ram of Tattu, beside that on the pillar 64 A. One of the capitals of these columns has been curiously patched up, by inserting blocks of granite and pegging them on by metal pins; the hole for one of these has been drilled out by a tube drill, made of thin sheet bronze, and fed with loose cutting powder; the drill was $\frac{1}{2}$ inch diameter, making a groove only $\frac{1}{40}$ inch wide, and a part of the core still remains in the hole, which is 1.7 inch deep.

One of the few remains of doorways (Plan, 134) seems to have belonged to the entrance of a side court; it has the characteristic slope of the front, and bears figures of Ptah and Mut (inscrip. 109).

3. Among the ruins of the granite pylon of Sheshonk III. are many pieces of the great colossus of Ramessu II., as have been described in Part I., (sect. 28); and beside these are several blocks, which though not bearing any surface of the statue itself, yet from the size of their hieroglyphics seem to have belonged to the inscribed pilaster of it, or to the built base on which it stood. The inscriptions of these are shown in Nos. 110 to 118. No. 110 bears evidently the beginning of the banner of Ramessu II., the bull, with part of the sign *nekht* below, and the tip of the tail of the hawk above it. The large size of this banner, about 45 inches wide, is, however, paralleled by a part of a cartouche (No. 113, plan 29) which must have been about 38 inches wide. Such inscriptions are about proportionate to the size of the great colossus, as compared with the inscriptions on other colossi; and, moreover, the granite of some of these blocks is distinctively the same as that of the pieces of the great colossus. The sculpturing on block 110 is important to the history of the temple of San: the banner of Ramessu II., 110 B, is plainly the earliest piece of sculpture on this,

since the legs on the adjoining side, 110 A, are on a curved surface which would not be exposed, and could not well be built up, and that side would therefore have been entirely dressed away if existing in Ramesside times. The dressing down of the face 110 A to build it in must be due to Sheshonk III., when he used this block, filling up the bull hieroglyph with mortar in laying it. The legs, therefore, which remain from a group of the two Niles, on 110 A, must belong to some work between Ramessu II. and Sheshonk III. Now Siamen did not execute large work, nor generally good work, to judge by the examples we have here, some of which are wretched; and yet there does not seem to be any other king to whom this can be ascribed. The sculpture being on a curved surface is very peculiar, and there is, perhaps, no similar instance of a large group on a curve. The fragments of inscriptions on various granite blocks (Nos. 119 to 135) are a selection from the many remains of the temple buildings; the blocks which only bore isolated signs, or some of the innumerable fragments of cartouches or titles of Ramessu, could be of no importance, except in an attempt at restoring the plans of the buildings; and such a task seems quite hopeless when such a small proportion of the material is left. No. 122 has a fragment of early inscription on it, already given as No. 24. No. 124 has an unusual arrangement of the *sam* and lotus. Nos. 123 and 127, with the pieces mentioned on the plate, show at least four Ramesside lintels, as the heights preclude our supposing any to belong together, except perhaps the first two pieces mentioned, Nos. 124 and 129 on the plan. Inscription 129 is an instance of almost complete erasure in later times. No. 130 has part of a group of Ramessu fighting, accompanied by his lion, as at Abu Simbel. No. 132 is a portion of Ramesside inscription on the under-side of the south of the pair of bases of columns placed by Siamen in front of the sanctuary; this shows that Siamen did not merely inscribe existing bases, but had cut these out of ruined blocks of the buildings of Ramessu.

4. Merenptah placed two fine statues of himself in the temple here (inscrs. 136, 137), one of grey, the other of pink granite. Both are now broken in two, and have lost the feet; but they are in fair condition, and worth preserving. The inscriptions are given in Nos. 136 and 137; and the many appropriations by Merenptah will be found before in Part I., Nos. 3, 4, 5, 8, 14, 15, 25, 26, 27, 28, and 29. A piece of his work in limestone, No. 138 (Plan, 226), was used by Siamen in founding the colonnade in front of the sanctuary; while two other blocks, Nos. 139 and 140, show that he also worked here in granite. Seti II. has one block of his work remaining, No. 141. Of Ramessu III. are two kneeling statues, one bearing a table of offerings (inscr. 142) carved in sandstone; this has unfortunately lost the upper part of the figure. The other statue (inscr. 143) is in dark grey granite, and is much weathered; but the shrine it holds still clearly contains figures of Ptah and Sekhet hand in hand. There remains one conspicuous block of the Ramesside period (No. 144) which is hard to attribute. By the inscription 144 B alone it would be at once supposed to belong to Ramessu II.; but on the adjacent side is a plainly Ramesside inscription 144 A, and this side is evidently the first cut, as it is much better work, and has had dovetailed cramp-holes made in its ends when used afterwards. Either, then, Ramessu II. broke up his own work, and had the pieces sculptured in a very inferior style, on a rough and irregularly curved surface, or else these must belong to a later Ramesside king, perhaps the twelfth. The inscription 88 (Plan, 262) is strikingly like this, but on a smaller scale; and the lower part of a somewhat similar arrangement remains at Abydos, only there the *ra* is placed immediately over the *sotep* as usual, and not—as here—to be read into place from the top. This would seem to show that the re-use of this block is due to Ramessu II. himself.

5. Pl. viii contains all that can be attributed to Siamen at San, beside the appropriations given

before in inscr. 15 B. Of these No. 145 is inscribed in one line, across what is now the underside of a great roofing block, Plan 236, but which was formerly the upper side. From the inscription being thus on a horizontal surface, and from the crab-hole cut into the top of it, it has evidently been re-used, perhaps by Pisebkhanu, since he built in the sanctuary. Of the inscriptions around the two bases of columns (186-7, Plan) enough remains (inscr. 146) to see the character, plainly borrowed from the Ramesside inscriptions. The lintel (inscr. 158) is very rudely cut, being merely marked in by a bruising away of the surface. The inscriptions 150 and 151 are two of the best examples of the work of Siamen, and should be preserved; the latter I found on clearing beneath the immense block, No. 236 in plan, and it had not been seen before. The block with inscription No. 152 is attributed to Siamen, because the style is too shallow and rough to be of Ramessu II.; and yet having crab-holes cut in it at a later time, it is probably before Sheshonk III., who built the pylon where this lies. No. 153 is a very rude and slight inscription, on the side of a base of an obelisk, the front of which is occupied with the usual decoration of Siamen, as on inscr. 150. The other fragments, 154-5-6, are attributed to Siamen from their style.

6. The great granite pylon built by Sheshonk III. out of earlier materials is more than half fallen. The most complete side is shown in Part I., pl. xv. 1, on which Sheshonk has been offering to some god, with Mut standing behind him. Many of the blocks of this pylon bear fragments of the figures with which it has been covered; but all the inscriptions remaining are given in pl. ix. No. 157 is on a piece of the back of the pilaster of the great colossus, and is a good piece of work of its age. No. 161 is remarkable, as it shows one stage of cutting an inscription; after painting it on the granite, particular signs were cut out first, apparently the easiest, such as *neb*; and in this case the engraver got no further.

7. The stela of Taharka is broken in two pieces; the lower was found in Mariette's clearance, and was copied and published by De Rougé, but—strange to say—no search seems to have been made for the upper part, which lay exposed. I arrived at the business from the opposite end; seeing the upper part of an inscription lying face up on a block of granite, I examined the quality of the stone, and then searched around for any pieces of the same kind; turning one such over, I found the lower part of the inscription, which had been placed face down by Mariette. The text here given is taken from a squeeze aided by a hand copy, but is of course rendered somewhat doubtful by the bad state of the stone.

8. Coming now to Ptolemaic monuments on pl. x., all of these were found during my excavations; only one inscription of this age was known here before, the great stela of San, now at Bulak. The value of these tablets mainly lies in their naming Am the capital of the nineteenth nome Am Pehu, and each of the deities represented is said to be of Am. This pointed to Am being at or near San, instead of at Buto or Pelusium, and the later discoveries at Tell Nebesheh seem to point to that as the actual capital. This will be more fully considered in dealing with those monuments. Photographs of the two important tablets, No. 164 of Ptolemy IV. and Arsinoe III., and No. 165 of Ptolemy II. and Arsinoe II., will be seen in Part I., pl. xv. 2, 3, and these finds are fully described in Part I., secs. 38, 39. (Misprint p. 32, line 6, read except; line 8, read The.) The whole of these tablets are now in the British Museum, exhibited in one of the bays of the Egyptian Gallery. No. 167 is a fragment of the back of a basalt statue, found in digging between the avenue of columns and the sphinxes. No. 169 is a fragment of a statue in grey granite, which was found on the site of a Ptolemaic temple, on the southern slope of the mounds of San. A large square area had there been dug out through

a great depth of artificial soil, and then filled with clean sand, to serve for the foundation of a Ptolemaic temple. A pylon of sandstone stood some way to the west of it, connected by an avenue, of which two rows of large blocks of red granite remain loose on the surface of the ground. Probably this part has been much denuded by weathering, and has thus exposed what were foundations originally. The inscription 170 is on a block of limestone, which I found in what appears to have been the great Ptolemaic temple of San, just outside the wall of Pisebkhanu on the south.

9. At the Bulak Museum are four statues with long inscriptions, found in Mariette's clearance of San; beside the sphinxes, &c., with short titular inscriptions like those already published here. The most important of these statues is that of Nefert, the queen of Usertesen II., finely wrought in black granite. The wig is very full, in a broad lumpy mass, which descends on the shoulders in two spiral coils, quite unlike the later wig of many plaits. The eyes were inlaid originally. There is also a similar bust which may perhaps belong to some of the fragments still at San. This inscription shows how manifestly those on the front of No. 11, and on No. 12 (Part I.), belong to the twelfth dynasty; most probably all these similar statues (for that usurped by Ramessu II. for his mother was like the others originally) were a set of the family of Usertesen II. The standing statue of Ramessu II. at Bulak (inscrip. 172) is like that I found some distance in front of the pylon at San; it is one of the best pieces of work of his in red granite. It was probably made rather late in life, as Merenptah appears on the side, and not Kham-uas; indeed, four of the eight lines of inscription belong to Merenptah; and the arrangement, holding a baton or standard in each hand, is more usual in the reign of Merenptah than under Ramessu. The seated statue (inscrip. 173) has clearly been altered from an earlier statue, traces

of the inscription of which may be seen in the front inscription. The head has been reworked, a pectoral carved on the chest, the girdle cut away and a cartouche inserted, and the inscriptions changed. Still it is a fine work, and the two hawks, cut in half round, standing face to face behind the head are unusual. There is no trace of any Hyksos appropriation on the shoulders. The other statue (inscrip. 174) is as plainly an original work of Ramessu. It is much poorer work—more clumsy, thick, and skew—than any statue before that age that I know, and most like a worse copy of the sandstone statues of Ramessu; the stripes of the kalantika are far wider than in early statues, and are unpolished in the hollows; it wears the pschent; the name on the girdle is not over any erasure, but on a place left for it in the carving, nor is there any sign of erasures; and it has a collar on. It was recognized by Mariette as an original of Ramessu II., but seems since then to have somehow gained the rank of an early statue undeservedly. These two statues are placed one on either side of the entrance to the Bulak Museum.

10. Having now noticed the inscriptions of San, we will turn lastly to the large stone well which I found there, and which is shown in pl. xii., and marked 40 in the general plan, Part I. This seems to be of the later Ptolemaic or Roman period, as the pottery found low down in it is distinctly of the second century A.D. It is a fine piece of work, and is of value to us as bearing on the question of the change of water-level in the country, which is probably equivalent to the rise in level of the inundated parts and river beds. The present water-level (and nearly the lowest, being in May) is marked in it, and covers half of the spiral staircase.

When we had by active work baled and dug it clear down to the lowest step in the middle of the well, the flow of water was so strong, streaming up from below, and pouring in at the joints of the stones, that it was impossible to go to the base of

the wall; indeed, it rose an inch in five minutes. From this it is at first manifest that the water-level must have been much lower, when they could excavate a much wider hole to build the well in, for the stones certainly extend 3 feet below our lowest water-level. Further, there would be no object in having steps descending 7 feet below the water, or in having the well so deep. It seems most likely that the well was planned anticipating that the end of the spiral staircase would reach the water, and then (perhaps in a drought), finding that it was not low enough, two additional steps were placed in the middle. Thus the lowest step would probably represent the lowest water-level. Moreover, there are holes cut in the ends of three steps, evidently to hold the peg-bottomed amphoræ upright; and these would be somewhat above water-level, as the use of them would be to enable a drawer of water to sit on the step and lay hold of the amphora to carry on the back. That these amphoræ must have been carried on the back is evident from their shape; probably a loop of rope was slipped round the peg-bottom, and kept from rising by the rim which surrounds the peg; then holding up the rope over one shoulder, and steadying the top with the other hand, the swell of the body of the amphora would rest on the shoulders and in the neck of the carrier. Looking then at these holes we should suppose that the water ranged from about the lowest step to about the level of the lowest hole. This would imply a rise of water-level of about 7 feet in 2000

years ($4\frac{1}{4}$ in. per century). The Nile levels are of course lower than the country water-level, as all the rain which soaks into the ground cannot percolate but very slowly through the tenacious fine mud soil; and the high Nile during some months tends to raise the water-level to its own. But probably a change in the country water-level is attendant on a similar change in the Nile water-levels. The result here agrees very nearly with evidences of deposit elsewhere. At Naukratis the rise has been about 9 feet in 2500 years ($4\frac{1}{3}$ in. per century), and the well-known data of Heliopolis and Memphis are not very different, though more accurate information as to the time of deposit is needed in those cases. Some further notes on the changes in the country will be found in the account of Nebesheh and Defenneh, in secs. 2, 3, &c.

Another large stone well was discovered about a furlong south of the pylon. This well had a square shaft to light the stairs; and, therefore, probably the stairs were a long flight, and the well was roofed over to keep out blown dust. This well is now about 20 feet beneath accumulated dust, and we needed to dig out a very large hole to work at it. Unfortunately, the water rose too rapidly for the men to be able to clear even to the base of the doorway in the well-side; and it was hopeless to examine it fully, without force pump and hose to throw the water and mud up about 40 or 50 feet. The levels observed here will be found in Part I., p. 51.

TRANSLATIONS OF THE INSCRIPTIONS IN "TANIS," PARTS I. AND II.

BY F. LL. GRIFFITH.¹

THE Inscriptions from 1 to 65 are published in "Tanis I."

11. No. 1. Block of red granite from a doorway showing part of prenomen PEPI I., sixth dynasty.

2. Block of red granite from a doorway,² published also by De Rougé, *Insc.* pl. lxxv.³ The two copies agree. "King of Upper and Lower Egypt, *Rā meri* (beloved of Rā), wearing the two diadems, loving the body (?), triple golden Horus, *Sa Hather nebt ant Pepi* (son of Hather, mistress of Tentyra Pepi), giver of all life, all stability . . ."

The connection of Pepi I. with Tentyra (Denderah) is shown by the tradition recorded in the Ptolemaic temple of the finding of a plan of the temple in the palace during his reign. The alabaster lid, pl. xii. 5, bears the same cartouche, and was bought at Qeneh, opposite Denderah, by Professor Sayce.

The cartouche of Pepi, beloved of [Hather], of Ant and [Tum] of Anu, found in the temple of Bubastis, shows that he was a builder in the

temple of On, probably at a later date. He seems, therefore, to have built temples successively at Tentyra, Tanis, Heliopolis, and Bubastis, in chronological order during his important reign.

12. No. 3. Statue red granite, AMENEMHAT I., cf. 23. Front of throne; right side, 3D. "Beloved of Ptaḥ Seker, lord of the crypt . . . living for ever."

Left side, 3C, "the beloved of Ptaḥ Res Anbuf (Ptaḥ south of his wall (?)), lord of the two lands, son of the Sun, Amenemhā[t], living for ever."

Back support, 3A, "beloved of Ptaḥ Res Anbuf, lord of the life of the two lands,"⁴ followed by the standard name *nem mesu*, "renewing births," and throne name *šetep ub rā*, "pacifying the heart of Rā."

Back of base, rows of cartouches of Merenptah, "giver of all life, all stability and purity, all health, all joy (or fatness?)."

Side of throne, 3B, cartouches of Merenptah.





Side of base, 3B, "the King of Upper and Lower Egypt, lord of the two lands, *mer amen ba n rā*, son of the Sun, *Merenpteh hetep her māu*, beloved of Uati ap tauī.

All the gods named in the early inscriptions of Tanis, except those on 2, 13, and 19, are Memphite forms of Ptaḥ, Osiris, and of the

¹ M. Naville has corrected the plates of inscriptions, before publication, throughout the two volumes of "Tanis," together with those of Nebesheh, Qantarah, and Defeneh, by reference in part to the originals, in part to photographs and squeezes. He has also looked through proofs of the whole of my translations. His notes to this chapter are distinguished by the letter N. He kindly drew my attention to the publication of some of the inscriptions in Burton's "Excerpta Hieroglyphica," and especially to the name of Usertesen I., that appears there on the statue numbered 5 in this work; as well as to an interesting discussion of the monuments which appeared in the "Mélanges d'Archéologie," p. 280, &c., from notes taken at De Rougé's lectures in 1869, by M. F. Robiou.

² Cf. De Rougé, "Mélanges," l.c.

³ Discovered by Burton, cf. Rougé, "Études sur les Six Premières Dynasties," pp. 115 and 116.—N.

⁴ M. Naville reminds me that  is the name of the temple of Memphis. But did not the phrase obtain its geographical significance at a later period, when even  is found, like , as a geographical expression formed from the local title of Ptaḥ?  was also a title of the Memphite Bast.

tomb gods. Uatī āp tauī, in the inscription of Merenptah, is the form of Uat worshipped at Pe Dep, and may be considered as the representative goddess of the northern marshes.

4. Statue black granite, USERTESEN I., cf. 5 and 8.

Front, 4c, and 4b, similar, "good god, lord of gladness, King of Upper and Lower Egypt. *Rā xeper ka*, son of the Sun [Useratesen], beloved of Anubis, chief of his hill, giver of life, like *Rā*, eternally."

Back support, 4a, "King of Upper and Lower Egypt, lord of the two lands, *Ba n rā mer neteru*, son of the Sun, lord of diadems, Merenptah *hetep her maā*, beloved of the most valiant Set for ever." This line belongs entirely to the usurper.

Back of base, 4a, l. 1 "[prince on the two thrones of] Seb, may he inherit the monarchy of¹ the two lands, prince of . . .

(2) . . . administrator of the two countries, the royal scribe, general in chief, royal son Merenptah justified (*sic*)."

(3) The offering is made to "Set, the very valiant . . ." by "his loving adorer, the hereditary chief of the two countries, the royal scribe, keeper of the seal, the commander of the troops, the king's son Merenptah justified." Beneath: "an offering of incense and liquid."

This inscription and scene were added on behalf of Merenptah when heir-apparent. He appears also on the statue No. 172 of his father Rameses II., and is there also called "justified."

5. Black granite statue, supposed by Mr. Petrie to represent Amenemhat II., but the copy of the front inscription, 5c, in Burton's "Exc. Hierog.," xl. 5, shows the full titles of USERTESEN I. partly erased and partly usurped by Merenptah.

Original scene of Niles, 5a, on left, partly repeated from other side, 5b. "He says I give to

thee all life, stability, and purity, all health, all joy (N.), like *Rā*, for ever."

Front (original), 5c (see the copy in Burton, l.c.), "The life of (?) Horus [life] of births, lord of the two diadems, life of births, the golden Horus, life of births, the king of Upper and Lower Egypt . . . *ka* (Useratesen I.) son of the Sun (Merenptah), beloved (?) of Anubis in his localities, lord of heaven, giver of life, stability, and purity, like *Rā*, for ever."

Back (usurped), 5c. Full titles of Merenptah twice repeated. "Life of Horus, strong bull, rejoicing in truth: King of Upper and Lower Egypt, lord of the two lands, *Ba n rā mer neteru* (soul of *Rā*, loving the gods): son of the sun, lord of diadems, *Mernptah hetep hr maā* (Merenptah resting on truth), giver of life for ever: Merenptah, beloved of Set."





Line round base (usurpation); on left, "Merenptah, beloved of Set, lord of *Hat uārt* (Avaris),² giver of life, stability, and purity, like *Rā*, for ever;" right, similar, but "beloved of Set, the very valiant, *āa pehti*."

6. Fragments sandstone statue, USERTESEN II. (?), (*Rā xā xeper*), cf. 171. 6a, part of the Nile formula; 6b, part of cartouche. *Rā xā* . . .

7. Fragment pink granite architrave, USERTESEN III. "*Rā xā kau* (brightness of the images of *Rā*), beloved of Osiris." Rougé, *Mél.*, l.c., mentions also a large limestone block with the name of this king. Burton publishes an inscription from Tanis of "Useratesen III., beloved of Khent ämenti (a form of Osiris, 'chief of the West')." "

8. Base of grey granite colossus. Upper line original; cartouche only altered, "Life of Horus, *ānχ mestu* (life of births), good god, lord of activity, King of Upper and Lower Egypt (Merenptah inserted), beloved of Osiris, lord of ānkh tauī."³

² For the hieroglyphic name of Tanis, see pp. 34, 35.

³ The  was carved by mistake in the middle of the line, as if for a group , but  not fitting the gap, a second  was added.

¹ "His heir before."—N.

Second line (usurpation). "Life of Horus, strong bull, rejoicing in equity, King of Upper and Lower Egypt, lord of the two lands, *Ba n rā mer neteru* (Merenptah)." Mr. Petrie must have overlooked the standard name *ānkh mestu* which fixes the statue to Usertesen I. This king seems to have had a pair of statues in black granite and a third in red granite in the temple. The leg of another? is at Berlin.

9. Block grey granite, apparently twelfth dynasty, "giver of life, stability, and purity, like Rā."

10. Fragment foot, twelfth dynasty. 10A (original), "like Rā, eternally." 10B (usurpation), beginning of cartouche "Rā . . ."

11. Black granite statue of a twelfth? dynasty queen, altered for the mother of Rameses II.

Front (original), left side, "the hereditary princess, the great favourite (N.), the very gracious, the consort . . ."; right side, same title, followed by others difficult to understand.¹

Back (inscribed by Rameses II.), "the royal mother who bare the strong bull, *Rā user māu setep n rā*, son of the Sun² (Rameses II.).

Side and back of throne (altered by Rameses II.), and inscribed with titles of his mother, imitating those of the earlier princesses.

Left side l. 1 = right l. 1, "the hereditary princess, the great favourite, the very gracious . . ."

l. 2, "the royal mother, the mistress . . ."

l. 3, { "the divine wife, the chief royal
Back l. 1, } wife . . ."

l. 3, { "the chief wife of the king, loving
rt. side l. 1, } him."

l. 2, "the divine wife, the royal
mother . . ."

¹ M. Naville's copy reads, "The *duat* of the favourites of the palace": the 'favourites' are women of the royal household, so also, very likely, is the *hest*.—N.

² The wife of Seti I. and mother of Rameses II. was named *Tuā*.



l. 3, "the hereditary princess, the great favourite, the very gracious . . ."

12. Black granite statue; inscription in front, titles of a queen of the middle kingdom, "the hereditary princess."

13. Part of red granite obelisk of middle kingdom, altered by Rameses II.; see also No. 60. The part shown is all original except the cartouches.

Apex, early cartouche erased and replaced by Rameses II. It was "supported" in a unique manner by two hawks wearing the lower crown, possibly a symbol of the Horus which appears in the name of the nineteenth nome.

Beneath, scene of a king (?) offering to a hawk-headed god crowned with *shu* feathers; at the top is the vulture called "Nekhebt, lady of heaven."

Then follows an erasure of the king's (?) name (replaced by Rameses II.), "beloved of Horus, lord of the desert hills (or of the foreigners),³ giver of life eternally." The attitude of the king offering is explained as "taking or offering (a vessel of peculiar shape) as a drink-offering."

14. Red granite sphinx, now in the Louvre. On chest, 14D, erased standard possibly of Amenemhāt II. (cf. Tau. I., p. 7); over it is the name of Merenptah; on base, right side, 14F, part of royal titles of Apepi (?). N.B.—The usual titles beginning with *Set* and ending with *meri*, i.e. "Apepi, beloved of Set," seem to have been on the right shoulder. On left shoulder, 14C, titles of "Merenptah, giver of life for ever;" on right, 14E, "King of Upper and Lower Egypt, *het xeper rā setep n rā* (the upper crown, offspring of the Sun, chosen of the Sun), son of the Sun,

³ In the chapter on the Nebesheh inscriptions I have endeavoured to show that Horus *neb xasxet*, or *neb setu*, is the god who was gradually developed in the course of Egyptian history into Khem as the god either of the desert portion of the nineteenth nome, or of the foreign people settled in the north-east portion of Lower Egypt.

Āmen mer Šašanq (Shashanq, beloved of Āmen), giver of life like the Sun."

Round base, standard inscription of Shashanq I.; begins apparently at right end of 14B and continues round corner of 14A, where a shorter inscription meets it from the left ". . . lord of the two lands, *Rā het' xeper setep n rā*, son of the Sun, lord of diadems, *Āmen mer Šašanq*, wearer of the two diadems, crowned with the pschent like Horus son of Isis, pacifying [the gods] with (?) justice, King of Upper and Lower Egypt, the very mighty? (*ūr next* (?)), lord of action, *Rā het xeper setep n rā*, son of the Sun, lord of diadems, *Āmen mer Šašanq*, beloved of Āmen rā, lord of the thrones of the two spheres [dwelling in ?] (14A) *Āpt* (East Thebes), lord of heaven . . . the very mighty in [all ?] lands" (or "in the land of . . .").

The early part of the twenty-second dynasty seems to have had much more connection with Thebes than with Bubastis. Thebes was the unquestioned capital of the country and Amen supreme in the dedications.

15. Red granite sphinx. 15A, part of early erased titles near base, "giver of life, stability, and purity for ever . . ."

On side, 15B, titles of Merenptah; see 14C above.

Inscription of Saāmen, "lord of the two lands, *mer Āmen sa Āmen* (beloved of Āmen Saāmen), beloved of Āmen rā, king of the gods."

Inscription round base, 15C, standard inscription of "Shashanq I., [golden] Horus, wielder of might, smiting the nine [bows], very victorious in all lands."

16. Brown-pink granite statue, SEBEKHETEP III. Front right side, 16A, "the good god, lord of the two lands, lord of activity, *Rā xā nefer* (the beautiful brightness of the sun), son of the Sun, of his body, loving him, *Sebekhetep*, beloved of Ptaḥ of the fair face on his great throne (or 'sanctuary,' N.)."

Left side, 16B, same as last, but "beloved of Ptaḥ res anbuf, lord of Ānkh tauī."

17. Black granite statue of MERMESHĀU. 17B, "The good god, lord of the two lands, lord of activity, King of Upper and Lower Egypt; *Smenx ka rā* (perfecting the soul of Rā), son of the sun, of his body, loving him; *Mer mešāu*, beloved of *Pteḥ res anbuf*, lord of the life of the two worlds."

The name *mer mešāu* means "chief of the infantry." It is the commonest military title, and was also the name of the high priests of Mendes. The cartouche occurs only on these statues at Tanis, and doubtfully in the Turin Papyrus in the thirteenth dynasty. The style of inscription and the dedication agree with this date.

On shoulder, inscription of APEPI II. 17C, "Good god *Rā āa qenen*(?) (very victorious Rā), son of the Sun, *Āpepā*, giver of life, beloved of [Set]."

The god's name beginning the inscription of Apepi (but read at the end) is erased. The reading of the throne name is not very clear on any monument and most indistinct on this.

Side of throne (usurpation of Rameses II.). At the top the serpent goddess *Uat* of the north with the symbol of eternal purity faces the vulture *Nexeb* (?) of the south with the symbol of eternal life. Beneath these are the Niles of Upper and Lower Egypt and the hieroglyphs, "She (i.e. Nekheb and Uat respectively) gives life and purity like Rā." The Niles are binding the hieroglyph *sam*, unity, with water-plants, symbolizing the union of Upper and Lower Egypt. Above the *sam* are the cartouches of Rameses II.

On back, standard and cartouches of Rameses II.; cf. 43B.

At base, "Rameses II., beloved of Sutekh."

18. From front of a similar statue? "as ruler of the two lands for ever."

19. Fragments of one or more obelisks. 19A, l. 1 on right, ". . . royal son NEḤESI;" l. 2, ". . . [made it as] his memorial to Set, lord

of Re aḥtu, who directs his countenance (i.e. counsels him (?));" 1. 3, The eldest [royal] son Neḥesi, beloved of Set, lord of Re aḥtu.

I cannot make any connected sense out of the other fragments, but 19D should probably be placed over 19B. 19E, the pyramidion of a broken obelisk, is important. The hieroglyphs read, "beloved of Hershef" (no *t*). The squeeze brought home by Mr. Petrie shows the head, high feathers, and ram's horns of the figure of Hershef apparently with both hands raised behind the back, one holding the whip. The rest is lost. For the date, &c., of the obelisk, see p. 32, note.

20. Pillar (2 and 3), "good god, lord of the two lands, lord of activity, RA ĀĀ ĀRQ, son of the Sun . . .;" (1 and 4) "he made it as his monument to his mother Per . . ."

The style seems late, and Wiedemann may be right in attributing it to the twenty-first dynasty. Mr. Petrie unfortunately did not find the original, which had been hidden by Mariette.

21A. Part of early obelisk altered by Rameses II., a portion of whose standard is shown.

21B. Part of early obelisk altered by Rameses II., part of whose standard appears. The remains of original inscription do not admit of translation.

22. False door, red granite, thirteenth dynasty?

23. False door, red granite, with remains of a cartouche. On the squeeze I could recognize the name of *Rā seḥetep āb*, i.e. ĀMENEMḤĀT I., the first king of the twelfth dynasty. It may have formed part of a chapel in which his statue 3 was placed. It is not unlikely that the king had a special chapel in which offerings were made to his statue.

24. Block of granite with early inscription on a large scale, reversed and re-used by Rameses II.

25. Sphinx in the Louvre from Tanis. 25c,

name of Rameses II. in front over erasure; 25D, name of Merenptah on shoulder; inscription of Rameses II. round base, 25A and 25B, running in two ways. Each starts from the *cruz ansata* near the left end of 25B; that running from right to left may be completed by reference to the fragment 28F, "Life of Horus, strong bull, beloved of Maā, lord of Sed festivals (panegyries of thirty years) like his father Ptaḥ Tathnen (?), the King of Upper and Lower Egypt, lord of the two lands; *Rā user maā setep n Rā*, son of the Sun, lord of diadems; *Āmen mer Rāmessu*, giver of life, beloved of Set."

Inscription from left to right, "Life of Horus, mighty bull, giving birth to the gods, possessing the two lands [King of Upper and Lower Egypt]; *Rā user maā setep n rā*, son of the Sun, of his body, loving him, lord of diadems; *Āmen mer Rāmessu*, giver of life, beloved of Set."

The inscriptions on the base are completed by two shorter ones, "Rameses II., giver of life, stability, and purity, (seated) on the throne of Rā for ever," and "Rameses II., giver of life, stability, and purity, image of all living (?) (or health of all living)."

13. No. 26. Hyksos sphinx, unfinished inscription of Rameses II. on base, completed by Merenptah, who erased his father's cartouche. "*Mer Āmen Rāmessu* (erased), giver of life, like Rā, for ever, [giver of] life upon the throne of Tum" and "... son of the Sun, Merenptah *ḥetep her maā*."

On the chest, 2B, part of cartouche of Paseb-khānen.

27. Fragments of one or more Hyksos sphinxes.

27B, c, on one fragment; 27B, "giver of life upon the throne of Rā," "giver of life, stability, and purity like Rā." 27c, part of name of Rameses II.

27D, E, F on another fragment to which 27c also belongs. Right shoulder, 27D and 27c, shows erased inscription of Āpepī (?) and

portion of cartouches of Merenptah. 27E, on left shoulder, portion of inscription of Merenptah.

27F. On chest, cartouche, *Āmen mer Pa seb* *χānen* PISEBKHĀNU of the twenty-first dynasty. 27A, on base, "like his father Ptah, King Rameses II."

28. Fore part Hyksos sphinx; on chest, 28c, "Son of the Sun, beloved, Pisebkhānu, beloved of Āmen rā, king of the gods,¹ giving life for ever."

On right shoulder, 28D, erased Hyksos inscription with cartouches of Merenptah.

On left shoulder, 28E, inscription of Merenptah.

On front of base, 28B, inscription of Rameses II.

Side of base 28F, "Horus, mighty bull, beloved of Maā lord of Sed festivals like his father Ptah, King of Upper and Lower Egypt, Rā . . . (Rameses II.)."

29. Fore part of Hyksos sphinx; on chest, 29B, same as 28c, but begins "good god" instead of "son of the Sun."

Right shoulder, 29A, same as 28D, but "good god" visible in the Hyksos inscription.

On base, 29c, inscription of Rameses II. same as 28F.

30. Base of forequarters of Hyksos sphinx; front same as 28B, chest same as 28c, left side, 30B, "possessing the two lands, King of Upper and Lower Egypt, Rameses II."

31. Hindquarters of Hyksos sphinx; inscription of Rameses II. on base, 31A.


14. No. 32. Portion of great colossus of RAMESSES II.

33. North colossus of Rameses II. at the Pylon. Inscription on back: l. 1, "Lord of Sed festivals like his father Ptah . . . very mighty like Menthu (?) in . . .;" l. 2 ". . . Rā giving birth to the gods, possessing the two lands, king . . .;" l. 3 ". . . crowned with the double

diadem, protecting Egypt, binding foreign lands (part of standard inscription) . . .;" l. 4, "golden (victorious) Horus, strong in years;" l. 5 ". . ."

Side inscriptions ". . . prince, lord of might, subduing the Sati (Asiatics), King Rameses II. overthrowing the strength of the foreign lands; none can stand before him."

34. South granite colossus at Pylon; back, l. 1 ". . . [emblem] of the universal lord, Rameses II., giver of life;" l. 2 ".;" l. 3, "what is pleasing to Harmachis . . .;" l. 4, "doing pious acts;" l. 5, "of the universal lord, given by (?) the lord of the two lands, the lord of diadems, giver of life, stability, and purity, like Rā, for ever and ever."

35. Sandstone colossus. 35A. Throne name of Rameses II. 35B. Personal name Rameses II. 35C. Personal name Rameses II. with addition *ūr mennū*, "great in monuments." 35D. "The daughter of the king, loving him (*merert f*, N.), the royal wife Āmen (?) *merit* living." 35E. ". . . the royal [wife] Ban-ta ānt living." 35F. Names of Rameses II. Amen *merit* and Banta ānt were daughters of Rameses II. raised to the position of queens. M. Naville's copy (1882) reads *Rā* . . . *it* in 35D, and . . . *sut* *hmt* Ban-tau () ānt in 35E.

36. Sandstone colossus. 36A. Throne name of Rameses II. with the addition "beloved of Maā." 36C. Names of Rameses II. 36B. "The great royal wife, mistress of the two lands *Rā mat neferu* (seeing the beauties of Rā), daughter of the great chief of the land of Kheta." Mr. Petrie informs me that the bird in this name is an eagle as in De Rougé's copy, Inscr. pl. cxxiv., which agrees throughout with Mr. Petrie's. M. Naville's copy also has the eagle. The reading in the plate is also confirmed by an interesting plaque found at Tell el Yahudiyyeh, in which, however, the bird appears to be a hawk. The name was misread *Rā maā ūr neferu* by Lepsius at Abusimbel? He mistook the eye of

¹ This makes it probable that Pisebkhānu, like Siāmen, was a Theban king.

mat for the cubit, the eagle *a* for the wagtail *ūr*, and the semicircle *t* for the mouth *r*. He also read *ta* instead of *āa* in the title of her father. The name is entirely Egyptian. *Rā neferu* is the name of an Egyptian queen, daughter of the prince of Bekhten, in the mythical story of the possessed princess, which seems to refer to the times of Rameses II.



37. Sandstone colossus. 37B. Throne name of Rameses II. 37A. *Rā user maā*, taken from the throne name. 37C. "The daughter of the king, the great royal wife Ba[n-tau? ān]t living."

38. Grey granite statue Rameses II. 38B. Throne name Rameses II.

39. Black granite statue Rameses II. 39A, B. Names of Rameses II. and portion of standard inscription, "mighty bull, beloved of Maā(?), lord of the two lands . . . crushing every foreign people . . . mighty king . . . strong in years." 39C. Personal name of Rameses II.

40. Standing statue. Ovals of Rameses II. three times repeated, twice horizontally and once vertically, with "giving life for ever and giving life like *Rā*"; also twice repeated, "beloved of Anubis (or Reshpu?), lord of the papyrus marshes."¹





41. Grey granite statue, attributed by Mr. Petrie to Rameses II. (Mr. Petrie agrees that this is probably of OSORKON II.) 41B. Cartouche on shoulder, "*Āmen mer sa Bast Uasaārken* Osorkon (II.) beloved of Āmen, son of Bast." 41A, C, D. Portions of standard inscription round base resembling that of Shashanq I. on the sphinx 15C, and therefore probably Bubastite, and of Osorkon II. 41D. "[Live the Horus,

strong bull . . .] crowned in Thebes? lord of the two lands [Osorkon II.]" 41A. "Wearer of the two diadems, uniting the two portions (i.e. Upper and Lower Egypt, the portions of Set and Horus), like the son of Isis, pacifying the gods. . . ." 41C. A squeeze of this shows that the fragment begins with  and ends with . ". . . the two lands [golden] Horus, wielder of might, smiting his enemy (singular), strong, spreading wide [his] terror" These titles of Osorkon II., I believe, do not occur elsewhere.

42. Fragment of red granite statue, portion of cartouche, and title "Lord of the two lands."

43. Granite triad. 43A. Side inscription, Rameses II., "beloved of Ptaḥ Tathnen." In the horizontal line Tathnen is phonetically spelt. In the vertical line it appears to be implied by the determinative, as elsewhere. Inscription on back, 43B. The four centre lines are taken up with the titles of Rameses II. "beloved" of Tum, of the moon god Āāḥ, of Khepra, and of Tum again. On the right side, "Harkhuti gives all happiness to the king Rameses II., beloved of Harkhuti," and on the left "Ptaḥ gives all life and purity to the king Rameses II., beloved of Ptaḥ Tathnen (?)," Ptaḥ and Harmachis therefore, with Rameses, formed the triad represented on the monument. They were the two chief gods of Lower Egypt, Ptaḥ of the civil metropolis of Lower Egypt, Memphis, and Harmachis the royal deity of the religious capital, Heliopolis. The latter half of the standard name in these lines besides the usual "beloved of Maā" varies to "son of Āmen (god of Thebes)," "son of Ptaḥ (god of Memphis)," "beloved of Rā (god of Heliopolis)." Such variations occur not uncommonly, but seldom cause any trouble in identifying a king.

44. North obelisk of the Hall; on Pyramidion, Rameses, Harkhuti (Harmachis), lord of heaven, and Tum, lord of the two lands [of On]; vertical lines, "Rameses II. (in standard *Maā mer, Sa*

¹ M. Naville read the combination of signs following  in the last word as a fish caught by a snare, and taking  as part of the geographical name, translated "Anubis, lord of the lake of the net, of the fishing lake." This was from the original, but the squeeze, which so often proves clearer, seemed to me to show plainly a monogram of  and  and Mr. Petrie agreed with me about the reading. I fear, therefore, that M. Naville's interpretation must be given up, in spite of its interest, and appropriateness to Lake Menzaleh.

Tum, and . . .), smiting the lands of the Sati, crushing the nine bows, reducing every foreign land to non-existence; strong of heart in war, a very Menthu in conflicts, a *māher* of *Ānthā*, bull of . . ., lord of diadems, . . . youth . . . valiant in arm . . . *Āmen mer Ramessu*, like the sun." *Māher* would seem to be a technical Semitic term for some grade in the college of devotees to Anaitis (*Ānthā*). There were male and female slaves devoted to Anaitis, with which one may compare *Māher Ānthā* and *Banta Ānt*. *Māher* was adopted into the Ramesside vocabulary as a proverbial expression for a man trained to hardship, a courageous warrior or pioneer, a "brave."

45. South obelisk (Rougé, Inscr. ccxcvi., gives the fourth side, but omits the middle line). On pyramidion, Rameses II., Ptaḥ nefer[her] and Ptaḥ res anbuf (or Tathnen?), "the very valiant." Vertical lines "Rameses II. (in standard name "strong bull with horns ready," "beloved of Ptaḥ" and "beloved of Maā"), valiant like Menthu, bull, son of a bull, subduing every foreign land, slaying their chiefs, directing his face (boldly) in battle, he is first in the combat; he conquers the land of Kens (Nubia) with his valour, he spoils the Thehennu (Libyans); very valiant like . . ., bull in the land of the Retnu (Syria); he conquers every land with his strength (?), he brings them to Egypt, (he) the lord of the two lands, Rameses II."

46 and 47. West pair of obelisks in the temple. 46. (Northern) on pyramidion, Rameses II. offering to "Tum, lord of the two lands, and ? [of On]," "to Har[khuti?]," "he gives wine to his father" and to "[Ptaḥ Tath]nen?"

Vertical lines, Rameses II. (in standard son of Ptaḥ, beloved of Maā, and . . .) . . . mighty, strong of heart like Menthu in the conflicts, (protecting) his soldiers, making a mighty overthrow of . . .

South obelisk 47. On pyramidion Rameses

II., Harmachis, "Shu son of the Sun," and "Amen . . ."

Vertical lines, "Rameses II. (in standard " . . . of Rā," "beloved of Maā" and " . . . of the two lands"), strong bull, wearing the two diadems, protector of Egypt, binding foreign countries, golden Horus, master of times (mighty in years, N.), great in victories (so far standard inscription), carrying away the chiefs of the Rethenu (Syrians) as living prisoners, crushing the land of the Hittites."

48, 49. Middle pair of obelisks in temple.

48. North obelisk.

Vertical lines; centre line, usual title and standard inscription of Rameses II. as on 47 with the addition "beloved of Amen rā, king of the gods." Other lines, "Rameses II. (in standard "strong bull, mighty and valiant" and "strong (?) bull, beloved of Menthu?)," he . . . the foreign lands, he penetrates them, he makes them bring the produce of their work to his palace . . . very terrible?; extending his boundaries to the ends of the waters? (mouths of the rivers?); none can turn his arm from his desire; . . . foreign land, opening its roads, he subdues it with his might (and brings it) to Ta merā (Egypt), Rameses II., giver of life, like Rā, for ever."

Scenes of offering beneath these lines.

49. South obelisk. On pyramidion, Rameses offering to Tum, lord of Heliopolis . . ., and Amen rā suten neteru.

Vertical lines. First line, standard inscription of Rameses II., beloved of Harmachis. Other lines, "Rameses II. (in standard "beloved of Rā" and . . .) opening the land . . . the land of Kheta, conquering it with his might, making a great overthrow in his victories: . . . the well-beloved, like Tum, making bright the two lands, shining like the two horizons, image (N.) of the universal lord, reigning in Heliopolis, lord of duration like the sun, Rā in heaven, Rameses II., living for ever."

At the base, "The life of Horus, the good god Rameses II.," "gives white bread to his father, performing the service of giving life" before "Amen rā, king of the gods, who gives all pure life, like Rā, every day."

50. Western obelisk in temple. On pyramidion, Rameses II. offers to "Shu, son of Rā, the great (?) god."

Vertical lines. "Rameses II. (in standard, "beloved of Rā," "strong and valiant," and "bull, son of Khepra?" or "bull Khepra?"), strong of arm, lord of the scimitar (?), protecting his soldiers; all lands are bowing before his terrors, king placing his boundaries at his will; none can stand before him; his scimitar (?) is victorious. Tum magnifies him as king of the two lands; he causes Egypt and Desheret (Arabia) to submit to him (N.); he gives him valour like his creator (N.)."

At the base, Rameses II. "offers a tray" or cake? to "Tum, lord of Heliopolis, great god, lord of heaven."

In a second scene the king "gives wine" to "Shu, son of Rā, great god, lord of heaven, lord of earth, giving all life and stability."

In a third the king "gives a tray" or cake to "Seb, father [of the gods]."

51, 52. East pair of obelisks in middle of temple.

51. North obelisk. On pyramidion names of Rameses II. without cartouches in the boat of Rā over scenes of the king offering to Tum, lord of the two lands (and of ?) On to "Ptah *ūr āmaxf*," to "Har khuti," and to "Ptah *neb maāt*."

Vertical lines, "Rameses II. (in one standard "beloved of Menthu") Menthu among the kings, repelling millions, valiant like (Set?) when he enters the conflict; mighty king, smiting every land, spoiling the land of the Naḥsi (Negroes), harrying (seizing) all lands with the strength of victory, possessing the land anew as at the first."

52. South obelisk. Pyramidion similar to 51,

Rameses offers to "Harkhuti, great god, lord of heaven," to "Tum, lord of On," to "Ptah Tathnen," and to "Ptah neb maā (lord of truth), father of the gods."

Vertical lines, "Rameses II. (in one standard name called "son of Ptah"), king, son of Tum, mighty and valiant, smiting every land with his scimitar, bringing them to Egypt: King with victorious scimitar, striking the Sati, strong in arm and valiant, saviour of his soldiers . . . victorious . . . upon (their?) horses . . ."

53, 54. Eastern obelisks. 53 North (Rongé, cexevii., gives all four sides). On pyramidion, titles of Rameses II.

Vertical lines, "Rameses II., royal child of Tum, the much beloved, warrior mighty with the scimitar, rescuing his soldiers: . . . uniting his limbs, beloved like the sun's disk, going forth in heaven . . . Kashi (Ethiopia), subduing the land of the Shasu, valiant like (Set?), a bull in the land of Rethenu."

54. South obelisk similar to 53.

Vertical lines, "Rameses II. (in one standard "beloved of Rā") . . . strong in his arms, bull, son of a bull: sacred (or mighty) . . . of Rā coming forth from the horizon?; he puts all lands beneath thy? feet . . . battlefields (N.), none can stand before him in any land."

55. Refaced obelisk in temple (see 21). On pyramidion Rameses offers to "Har khuti" and "Har neb setu" or "khaskhet."

Vertical lines, "Rameses II. (in standard beloved of Seb, Rā, and Maā), king, very mighty, valiant and mighty with the scimitar, beloved of Menthu, overthrower; he hits his mark? always in a moment, he is courageous . . . he is the offspring of Tum? issuing from his limbs . . ."

The occurrence of the god "Horus of the foreigners" again is interesting.

56. Sandstone obelisk in wall of Pylon. "Rameses II. (in one standard called "son of Tum"), great ruler of . . ."

57. Fragment of obelisk. On pyramidion, Rameses II. and Shu.

58. Fragment of obelisk. On pyramidion, Rameses II. "gives wine" to "Tum, ruler of On," and "Shu, son of Rā."

59. Fragment of obelisk. On pyramidion, "Rameses II. gives wine" to "[Harmachis], great god, lord of heaven," and "a figure of Maā to [Tum of] Heliopolis."

60. On pyramidion, Rameses II. offers to "Set . . ." "Har khuti," "Tum, lord of On," and "Horus. . . ."

Vertical lines, standards of Rameses II., "very valiant," "son of Tum," "beloved of Maā," "beloved of Rā."

61. Refaced obelisk; cf. also No. 13. On pyramidion, names of Rameses II.; in vertical lines, "Rameses II." in standard called "beloved of Maā," "beloved of Rā," "son of Amen."

62. Part of obelisk, with names of Rameses II. in standard, also "beloved of Amen? (or Menthu)" and "Rā."

63A, B. Fragments of inscription on base of obelisk, usual titles of Rameses II.

64. Pillar, with sixteen scenes of Ramessu offering (1) to "Ptah nefer her," (2) "*Ba neb Dadat* (Mendes)," (3) "*Sepdu nefer ba n rā*, the beautiful mummied hawk Sepdu, the soul of Rā" (god of the city of Goshen), (4) "Set, the most valiant, son of Nut," (4) . . . , (5) "Shu, son of Rā," (6) "Seb, father of the gods," (7) "Set, great god, lord of heaven, the most valiant." (The rest are illegible.)

65. Pillar. Inscriptions of Rameses II. of the usual style, mentioning the Thehenu (Libyans); the second line from the left contained the standard inscription: in the last line it is said that "he reduced the land of Kheta to non-existence."

Note also in "Tanis," I., pl. xii.

No. 5. Alabaster lid from Qeneh with name of Pepi, son of Hathor, mistress of Ant (Denderah) (see p. 15).

No. 25. Blue pottery disk with name *Rā nefer āb* of Psammetichus II.

No. 32. Seal from South Tell of Zuwelên ". . . singing priestess of Mut . . . perfected."

The rest of the inscriptions are in the plates of the present volume.

66. White limestone altar, Rameses II.

"Live? the (the living, N.) King of Upper and Lower Egypt, lord of the two lands; *Rā user maā setep n rā*, son of the Sun, lord of diadems; *Amen mer Rāmessu*, giver of life like the sun every day, beloved of Thoth, lord of Sesennu (Hermopolis in Upper Egypt), great god, lord of heaven," repeated inscription running both ways.

Thoth of Hermopolis was a very important god, and it is not surprising to find an altar dedicated to him at Tanis.

67. White limestone altar, Rameses II.

"Live the King of Upper and Lower Egypt, *Rā user maā setep n rā*, son of the Sun, lord of diadems; *Amen mer Ramessu*, giver of life . . . beloved of Menthu, lord of Uast (West Thebes), great god, lord of heaven."

68. Two sandstone shrines, almost identical. On outside of roof vultures alternate with names of Rameses II. Down the middle ". . . the dignity of (N.) Tum as lord of eternity, lord of diadems, *Amen mer Rāmessu* upon the throne of Horus, like Rā." On edge of roof "as exists the sky, so (N.) are thy memorials established, O King Rameses II. . . . Rā in his? rising; thou art like (N.) the circuit of the disk, lord of diadems; *Amen mer Rāmessu da ānkh*." On right side, ". . . Tum resting upon thy handiwork, King Rameses II. Thou dost flourish as king for ever and ever."

Back of shrine. Upper scene. Beneath the winged disk Tum and Harmachis give the sign of life to the hawk upon the standard name of the king. "He gives all life, all stability, and purity, all health, all happiness to King Rameses II."

Lower scene. Rameses II., "beloved of Seb

and Shu," offers to "Seb, father of the gods, and Shu, son of Rā." In a general way at the sides Rameses II. is styled "beloved of Tum, lord of Heliopolis," and "of Harmachis."

On sides of shrines in centre Rameses II., "beloved of Tum, lord of On" (var. "of the two lands of On, great god"), "offers white bread and performs the service of giving life" to "Tum, lord of Heliopolis."

On right, the king, "beloved of Harmachis," "gives wine, performing the service of giving life" to Harmachis, great god, lord of heaven (var. "lord of the great temple of Heliopolis").

On left, the king, "beloved of Kheprā (var. Kheprā in his boat)" gives incense? to "Kheprā in his barge."

Inside shrine. On right side, "the king, of pious acts, Rameses II." "gives wine" to "Tum, lord of the two lands of On," also called "Tum lord of the two lands of On, great god, lord of the great temple of Heliopolis," who "gives all life and all health."

On left much broken, apparently the same scene with "Khepra, great god," instead of Tum.

69. Fragment of scene from top of stela. Rameses II. "offers incense to his father Harmachis," or Ptah (?).

70. Fragment similar to last. Rameses II. offers to "Harmachis, lord of heaven."

71. Fragment of commencement of inscription on granite stela. "Horus, mighty bull, beloved of Maā (Rameses II.) . . . many, subduing . . . Rameses II."

72. Fragment granite stela. "All [lands] beneath his sandals."

73. Fragment granite stela. l. 1, " . . . Rameses II. giving life . . ."

l. 2, " . . . ye . . . making you guardians upon the road . . ."

l. 3, "every day"

l. 4, "give to me"

l. 5, "my spirits . . ."

74. Fragment granite stela. l. 1, Rameses II.

l. 2, " . . . (Cf. 44, middle line, N.)

l. 3, " . . . bearing their labours. . . ."

75. Fragment granite stela. l. 1, "slaying."

l. 2, Rameses II.

l. 3, " . . ."

76. Obverse. l. 1, " . . . mighty, strong in valour . . . his arm."

l. 2, " . . . Menthu, done by his arm, fighting, preserving his might, bull of Baal?"

l. 3, " . . . King Rameses II."

l. 4, " . . . The great chiefs of all lands at home and abroad felt reverence for him. (When) his spirits came they bowed their heads?"

Reverse. l. 2, King Rameses II.

l. 3, " . . . than millions of soldiers united in destruction (N.)."

l. 4, King Rameses II.

77. Portion of granite stela. l. 1, " . . . with his strength? upon the foreign land, sallying forth . . ."

l. 2, "son of the sun, *mer Amen Rāmessu*, king, wielding power, subduing . . ."

l. 3, "all lands fighting, with him, King Rameses II."

l. 4, "The very valorous upon horses. He seized his bow, he shoots . . ."

l. 5, " . . . tens of thousands by his own might, he was stronger than thousands, he was at its head (N.), he knew . . ."

l. 6, "King of Upper and Lower Egypt, Rameses II., great ruler, rampart of Egypt, remembered by . . ."

78. Granite stela; cf. De R. (Inscr. pl. lxxviii.), from whose copy this translation is made.

"Live? the Horus, mighty bull, beloved of Maā, trampling [every land beneath his feet, bringing away] their chiefs? King of Upper and Lower Egypt; Rameses II., giver of life for ever.

(2) mighty king, strong in battles, valiant in fight against 10,000, overthrowing on his right, slaying upon his left like Set in his time of fury (N.).

(3) mighty bull, repelling every foreign

people, opposing them with the might of his arms; defending Egypt, smiting the nine bows; every land trembles before him; he? is as a

(4) lion who hath tasted battle; no land can stand before him; King of Upper and Lower Egypt, Rameses II.; entering the combats.

(5) he doth not turn back: he marches at the head of his warriors, strong upon his horses; he seizes his bow, he shoots on his right, he does not miss; he stands firm on the ground, mighty, valiant.

(6) and victorious; his arm holds the mace and the shield; he dashes the chiefs beneath his sandals, (they) know not how to receive the onset; every foreign land flees before him, his terrors are like fire pursuing them.

(7) King Rameses II. living for ever. He spoiled the lands of the Sati with his might; he brings their chiefs as living prisoners.

(8) . . . With the strength of his might, a youth, mighty . . . victorious like Menthu, strength of the plains (?) (this half-line is omitted in Rougé, and the end of the next misplaced).

(9) husband of Egypt, protecting her from every foreign land, his spirits are courageous. . . the negroes with his might; he slays the Anu of the vile Kush. (10) by the might of his arms victorious, he makes Egypt rejoice, Ta Merä to be glad of heart, king [Rameses II.].

(11) spoiling the chiefs of the Sati in their lands, he destroys their inheritance? . . . he makes them . . .

(12) slain beneath his sandals he makes (read *sejem* in R. after P.) his onslaughts upon them, he harries the western desert, making it . . .

(13) . . . Menthu upon his right fighting, King Rameses II. he travels . . .

(14) to him with their products, he opens . . . the Sharutani failing in (N.) heart.

(15) them he seizes . . . the ships fighting in the midst of [the sea] . . .

(16) before them . . ."

Other side, not in Rougé. (l. 1) "Live the Horus, mighty bull, beloved of Maā, carrying away all lands with the force of his might, King Rameses II.

(2) king, strong in arm, mighty in valour, prince, victorious, watchful, smiting every land, great in spirits, mighty in valour, smiting the nine bows, reducing the foreign lands to non-existence.

(3) ruler . . . bold warrior, protecting Egypt with his scimitar; the land is possessed with fear of him, the mighty ones yield (? rare word) before him, their limbs fail.

(4) fear is within their hearts (N.), their bellies . . . King Rameses II., every land trembles . . .

(5) making their hearts firm, their spirits . . . calling upon the gods when he comes and rescues them? . . .

(6) which no light shines . . . upon their horses; he smites the foreign lands, he overruns them.

(7) making a great overthrow in the land of the Hittites . . . fighting in the plains (N.), namely, the king, Rameses II.

(8) . . . smiting the foreign lands, marching at the head of his soldiers.

(9) . . . bull . . . Menthu on his right hand . . .

(10) Rameses II., giver of life, smiting every foreign land beneath his feet."

78 bis. "l. 1

l. 2, I will provide you . . .

l. 3, Rameses II. he said to his messengers . . .

l. 4, camping-station provided with everything . . ."

79. Granite stela, scene Rameses II. and Ptah neb maā, "who says I give to thee all offerings (?), all happiness."

On the other half, Rameses II. and Set āa peḥti, "who says I give thee all pure life and victory." Behind the king, "preserving life behind him like Rā."

80. Portion of granite stela.

81. Granite stela (cf. De Rougé, *Insc. pl.* lxvii., from which this translation is made), scene *a.* Rameses II. and Set āa pehti, lord of heaven, making him live. *b.* the king, beloved of Seb.

Inscription, "(1) the Horus, strong bull, beloved of Rā, trampling all [foreign countries beneath] his [feet], King Rameses II. master? of victory, setting a watch, mighty and valiant, harrying all lands with victory. Strong, mighty in valour like Set, strong of arm, King Rameses II., giving life, smiting every land with his scimitar, carrying them to Egypt. He smites the inhabitants of the South land, he slays their chiefs, reducing the rebellious countries to non-existence.

Great of spirit, wielding courage, smiting the Sati, King Rameses II.

Prince whose fame reaches to heaven, making a great overthrow in the land of the Shasu. King Rameses II., giver of life. The chiefs bring their works to [his palace]."

82. Stela of Rameses II. with defaced inscription. In one of the scenes Rameses offers to "Tum, lord of the two lands of? On.

83, 84. Portions of one obelisk of Rameses II. 84 should be placed immediately above 83.

83A, 84A, line 1, standard inscription of Rameses II.

1. 2, ". . . he came, he celebrated a festival . . ."

83B, l. 2, ". . . the camp of his soldiers . . ."

85. Portion of obelisk, "like Tum? lofty in station (duration, N.) like the sun's disk."

86. Portion of obelisk of Rameses II.

87. Portion of granite architrave with name of Rameses II.

88. Portion of granite architrave, cartouches of Rameses II. alternating with a kind of monogrammatic, Rā user mā setep n (?) rā.

89. Portion of granite architrave with name of Rameses II., "beloved of Tum, lord of On."

90. Portion of unfinished granite architrave with name of "Rameses, beloved of Tum;"

apparently the temple is compared to "the horizon in heaven" in which Tum rested.

91, 92, 93. Portions of granite architrave with name of Rameses II.

94. Portion of granite sanctuary with name of Rameses II.

95. Portion of the same; "giving wine to his father, performing the service of giving life."

96. Portion of the same, the god is named ". . . Rā of the East, Tum."

97. Portion of the same.

98. Portion of the same. "Offering of wine as a gift of Rameses II.;" the god says "I give to thee the festivals of thirty years of Rā."

99. Similar.

100. Portion of the same. Rameses II., beloved of Harkhuti and other gods.

101. Portion of the same. Rameses II., "beloved of Tum, lord of the two lands of On." The inscription at the side begins with *Unn*, a strong form of *is*. "Thus it is: the king, &c."

Rameses II. "offers a figure of Maāt."

102. Granite column. Upper inscription, "(1) good god, mighty in rule, like his father Rā in heaven, brightening the two lands like his horizon.

(2) Rameses II. . . . lord of *Sed* festivals like his father Ptah Tathnen?

(3) Standard inscription.

Middle inscription, Rameses II., "may he be joyful (N.) together with his *ka*." Rameses II., "beloved of Amen rā, lord of the thrones of the world, lord of heaven, and of Tum the lord (?). Harkhuti, great god, lord of heaven."

Lower inscription, "son of the sun, of his body, loving him; Rameses II., beloved of Ptah, lord of heaven, king of the two lands," and "son of the sun, of his body, loving him; lord of the scimitar Rameses II., beloved of Ba neb Dada (Ram Ba, lord of Mendes)."

At the side of the erased scene "his admirer, who loves him, his son coming forth from . . ." The latter half of the personal name of Rameses II. is erased, probably to make way for Sa Bast

Uasaarken (Osorkon II.) or for Shashanq III., both of whom would also alter the Rā to Bast by changing the hawk's head to that of the lion.

103. Granite column, with fragments of similar inscriptions, "he made it as his memorial to his father . . . Rameses II., beloved of Harkhuti."

104. Portion of granite column. "Good god, likeness of Rā, avenging (fabricated "by" N.) Harkhuti, making the lower crown of Tum." This perhaps refers to the myth of Horbehud crushing the rebellion against his father Harkhuti. On the other side is part of the standard inscription, "golden Horus" being written in a curious way more frequent on papyri than on stone monuments.

105, 106, 107, 108. Fragments of column inscriptions.

109. Part of doorway, names of "Rameses II.," "Ptah, lord of heaven," and "Mut, lady of heaven."

110—118. Fragments probably of the great colossus.

112. "(says) the Nile god Hāpi." This inscription, no doubt, belongs to the scene of the Niles, a portion of which appears in 110A. See p. 10, col. 1, for Mr. Petrie's note on 110; but the columns of small inscription on 112 being parallel to the large ones make it probable that they are contemporary and Ramesside, the scene to which they belong being placed at right angles on the curved surface of the statue?

114. "[Amen] rā, king of the gods dwelling in . . ." The name of the city is unfortunately lost.

119—122. Miscellaneous granite blocks, inscriptions of Rameses II.

123. Portion of the lintel with title of the winged disk. "The *Behud*, great god, the ray, lord of heaven, coming forth."

124. Granite block with name of Rameses II.

125. Granite block with traces of historical inscription relating to the building of the temple by Rameses II. ? ". . . with good stone of An: north . . ."

126. "He places Maā upon his hands."

127. Portion of lintel.

128. "The *Behud*, great god, ray coming forth from the horizon."

129. Erased inscription of Rameses II.

130.

131. ". . . as ruler, happiness, upon the throne of Horus."

132. Inscription of Rameses II. on block re-used by Siamen.

133. "I am lord of the scimitar to every land."

134, 135. Granite blocks with names of Rameses II., "beloved of Seb, father of the gods."

For other inscriptions of Rameses II., see Nos. 172, 173, and 174.

15. No. 136. Standing statue, MERENPTAH.

Beginning from right side, l. 1, "Live the Horus, strong bull, son of Amen, King of Upper and Lower Egypt, lord of the two lands; *Mer Amen ba n rā* (beloved of Amen, soul of Rā), son of the Sun, lord of diadems; *mer Ptah hetep her maā* (Merenptah resting on Maā), beloved of Amen, lord of the diadems? of the world."

l. 2, Same as last, but "son of Ptah Tathnen" in standard, and "beloved of Ptah Tathnen."

l. 3, "Son of Amen" in standard, "prince strong in years."

l. 4, "(great) in rule, Ra as king."

l. 6, "Ra as king of the two lands."

l. 7, Merenptah, son of the Sun, beloved of Amen; lord of the diadems and crowns, giver of life, like the Sun, the first for ever and ever *twice over*."

Round capital of sceptre Merenptah, "beloved of Amen, lord of the diadems (?), of the two lands."

The usual title of the standard of Merenptah is *hāu m maāt*, "rejoicing in truth," as on the other statue.

137. Standing statue Merenptah.

Side of sceptre. Translation doubtful, "giving

truth? to Rā daily? King Merenptah, beloved of Ptah Tathnen (the god) whose feathers are high, who is furnished with horns."

138. Name of Merenptah on limestone block re-used by Siamen.

139. Granite block, Merenptah and Tum nefer "the hawk." (The name of Nefer Tum is determined by the feather crown that he wears and by the seated figure of a god.)

140. Granite block, Merenptah and . . .

141. Block of SETI II., "lord of the two lands, *Ra user xeperu mer āmen*, Rā, strength of all creatures, beloved of Amen, lord of diadems, Seti Merenptah" and "Tum . . ."

142. Sandstone kneeling statue of RAMESSES III. holding table of offerings. "Live the Horus, strong bull, great in rule, King of Upper and Lower Egypt, lord of the two lands; *Rā user maā mer Amen* (the veritable strength of Rā, beloved of Amen), son of the Sun, lord of diadems, *Rāmessu haq An* (ruler of Heliopolis) giver of life;" on table of offerings, "live the good god . . . Egypt? Rameses III."

143. Grey granite statue, "Rameses III., beloved of Amen rā . . ."

144. A. ". . . hundreds of thousands of Sed festivals (i.e. periods of thirty years each), tens of millions of years."

16. No. 145. Block of SIAMEN, re-used by a later king. "King of Upper and Lower Egypt, piety? to his father, *Rā netr xeper setep n āmen*, godlike, offspring of Ra, chosen of Rā, son of the Sun, lord of diadems; *mer āmen sa āmen* (Siamen), beloved of Amen rā, lord of the thrones of the earth."

146. Block with titles of Siamen, re-used by a later king. "Live the Horus, mighty bull, beloved of Maā, son . . . of Amen, issuing from his limbs." This fragment of the standard title of Siamen, from the base of a column, appears to be unique.

147.

148, 149, 150. Fragments with name of Siamen

151. Siamen and the god Khem āmen, who says, "I give to thee the nine bows as thy property (N.)."

152. Name of vulture Nekhebt.

153. Fragment with cartouches of Siamen and illegible inscription.

154, 155, 156. Fragments.

157. Fragment of scene of *Rā user maā setep n rā Amen mer sa Bast shashanq neter haq An*. SHASHANQ III.

158. Similar to last.

159. Fragment of same date with cow-headed goddess Hathor, of N . . h.

160. Fragment of same date with Moon god Thoth, lord of Hermopolis Magna.

161. Fragment of same date (?) with Khem-like god.

162. Fragment with Sekhet? mer? Pteh āa . . .

These inscriptions, from 157, are on blocks of the pylon built by Shashanq III. The scenes with which it was covered represented the king worshipping a number of divinities.

17. No. 163. Stela of TAHARQA.

Latter half in Rougé, Insc. lxxiii.-iv. (translated by Rougé, "Mélanges d'Archéologie," I. p. 21, and Birch, Trans. Soc. Bibl. Arch., 1880, p. 193). His copy is different in some places. The stela is much weathered. Mr. Petrie's excellent copy was revised by M. Naville from the squeezes.

1. 1. [says the king Taharqa, I was the younger son of my father? . . .], he [gave] me a goodly field . . .

1. 2. . . . around it? he prevented the locusts from devouring . . .

1. 3. . . . he took (as his share) of it the animals. I took as my share the harvest.

1. 4. . . . all the flax? and corn . . .

1. 5. [I was brought up?] amongst the king's children . . .

1. 6. [lo I was] loved by my father more than the (rest of) the royal children.

1. 7.

l. 8.

l. 9. [Now when] my father Amen [had placed] all lands beneath my feet.

l. 10. . . . [Eastward] to the sunrise (N.), westward to . . .

l. 11. . . . as sister of the king, palm of love, royal mother.

l. 12. . . . Behold I had parted from? her as a youth of twenty years.

l. 13. [For] he (that is king Taharqa?) went to the north land. Now she descended the river to¹

l. 14. [and reaching this city] after many years she found me crowned . . .

l. 15. . . I had received the diadems of Rā, I had united the two uræi upon?

l. 16. [my forehead? the god . . .] was protecting my limbs. She rejoiced exceedingly,

l. 17. [looking upon] the beauties of his majesty, even as Isis views her son Horus crowned upon the throne

l. 18. [of Seb (Masp.)], after he had been as a youth in the marshes (*Seš*) of [Natho (or the papyrus beds).

l. 19. Then] all foreign lands bowed their heads to the earth, to this royal mother, [they] were

l. 20. . . . to the earth (?), their great ones together with their little ones

l. 21. [were doing obeisance?] to this [royal?] mother, saying, "as Isis received

l. 22. [Horus so the queen finds] her son the King of Upper and Lower Egypt, Taharqa (*Tahelq*) living for ever.

l. 23. . . . Thou art living for ever in prosperity.

l. 24. . . . he (the god Amen?) loves him who knows his will, he causes to join

l. 25. . . . beautiful things that he (thy father?) did to thee, thou mighty king.

l. 26. . . [as Horus . . .] to his mother Isis. Thou art crowned upon [the throne of Seb?]."

¹ See Addenda for the correct reading.

18. No. 164, 165, and 166. Tablets now in the British Museum. I have compared the plates with the originals and can guarantee the readings in the following, as far as they go. The inscriptions are carelessly cut.

164. Limestone tablet from shrine in Ptolemaic chapel. Above "Behud, the great god, lord of heaven."

On the right the "lord of the two lands, *Au netrui menχui setep n amen rā Ptah . . . ānχ*, offspring of the gods Euergetes, chosen of Amen, Lord of diadems, *Ptualmīs ānχ Tēta Āst mer*, Ptolemy, living for ever, beloved of Isis (PTOLEMY IV.?),"

and the "lady of the two lands, *Arsin sen mer* Arsinoe Philadelphos,"

stand before (1) "Khem, lord of Amt, Horus, dwelling in Set hāā."

(2) "Hor Sa Āst Sam tauī, the prince (appears to have the crown of Lower Egypt), great god, dwelling in Amt."

(3) "Uat of Amt, eye of Rā, lord of heaven, mistress of all the gods."

She says, "I give to thee (*sic*) all pure life, all victory, all prosperity."

165. Limestone tablet from a site south of the temple.

Two scenes, (1) the King of Upper and Lower Egypt, lord of the two lands, *Rā user ka meri Amen*, strength and ka of the Sun, beloved of Amen, son of the Sun, lord of diadems, *Ptualmīs* (PTOLEMY II. PHILADELPHOS).

Offers to (a) "Khem, Lord of Amt."

(b) "The Net, regent of the two lands, princess, lady of thrones (traces of same cartouches as in 166); *Alsīn mer senu?* (very indistinct), Arsinoe Philadelphos (loving her brother?).

(2) The same king offers to "Hor sam tauī pa χred, dwelling in Amt, and Uat, lady of Amt, eye of Rā, lady of heaven, mistress of the gods."

166. Limestone tablet from chapel. King Ptolemy Philadelphos, "son of the sun *neb ta*" (so on original), and "*Arsā (sic) sen mer*" (Arsinoe

Philadelphos), whose second cartouche *χnem āb suten? neteru mer* is legible and may be translated "uniting the heart of the king, beloved of the gods." She is again entitled (on the original) *Net neb tauī* and *Erpet*. As to the title Net, her second cartouche has been found only in *Lower Egypt*, at San and Tell el Maskhûta. Thus Net must mean queen of Lower Egypt, and not simply "queen" or "queen bee" as might otherwise be supposed. At Tell el Maskhûta the first oval of Arsinoe begins "uniting the heart of *Shu*."

There is a squeeze of another tablet from the chapel without inscriptions, showing a Ptolemy in Egyptian dress, Philadelphos (?) offering to (1) Khem, (2) Horus, (3) Uat, and (4) a queen Arsinoe (?).

167. Back of basalt statue of the Ptolemaic or Roman period, from great temple. Inscription doubtful.

168. "Hor neb mesen [dwelling in T'a]l." For T'al, the capital of the fourteenth Sethroite nome, see the memoir on Qanṭarah. "Khensu [pa] khred (the child), the very great, son of Amen." Both of these gods appear on the statues of Teos, from Tanis, Brugsch, Z.F.A.S., 1872, p. 16 ff.

169. "King Ptolemy restoring the places (temples) . . ." The cartouche corresponds best in Kgsb. with cartouche K of PTOLEMY XI.

170. Limestone block. "Ptolemy (in the standard *nem mesu* "renewing birth") performs the ceremonies of . . . house of (?) writing" before the goddess "*Mer?* or *Mehit?* *Ast* (Isis) raising high the offerings of the house of gold." (The king holds a large paddle.)

(She says) "I am going at the head of the house of . . . my arms are warding off Shu and Tefnut (?), while there goes and brings . . . to me (?) . . . They place them in the hidden house."

Beneath is a bull galloping, called "Horus in Bennut in his form of a black bull."

"They bring? him to? the house of gold."

Upper lines: "the water to . . . in order to enrich the earth with products (N.).

Horus dwelling in Bennut, bull with horns ready (to attack).

Climbing he ascends the two Niles.

He performs his wish, he searches out . . . that he made."

The standard name *nem mesu* does not occur in Lepsius. The cartouche belongs perhaps to PTOLEMY IX.

19. No. 171. Statue from Tanis at Bulaq. On breast Ra khā kheper (Useresen II.).

"The hereditary princess, the great favourite, the very gracious, the consort of Rā khā kheper, beloved mistress of the two lands, royal daughter . . ."

"The hereditary princess, the great favourite, the very gracious, the consort of the wearer of the two diadems, beloved, mistress of women, the lady, the king's daughter, of his body, Nefert perfected."

172. Statue of Rameses II. at Bulaq.

On back, Rameses II., "beloved of Hathor, lady of Mat" and "Āpuat sekhem tauī." "All life, stability, and purity, all health to the hereditary (heir-apparent)."

Front of right standard, Rameses II., "lord of *Sed* festivals like his father Ptah . . . beloved of the southern (?) Apuat regent of the two lands."

Front of left standard, Rameses II. ". . . subduing the foreign peoples; Ra, father of the gods, joining the two lands; beloved of Hathor, mistress of Mt'a, regent of the gods."

Other parts are prayers in behalf of the heir-apparent Merenptah. They are: "all life, sam (*stability*), and health" (on left standard); "all power and victory" (on right standard); "all life, stability, plenty and health for the hereditary chief of the two lands, the royal scribe, the chief general, the royal son, the Sam . . . Merenptah justified" (right side).

The Āpuat mentioned was god of Lycopolis

(Siyût), and the Hathor of Mat' was worshipped in the Lycopolite or the Hypselite nome.

173. Seated statue altered by Rameses II.

On back, Rameses, "beloved by Set," "Tum-Kheper," and "Nut"; and "conciliating the two hawk gods," i.e. Set and Horkhuti (?).

On the sides he is "beloved of Tum lord of On, Horkhuti, Ptah lord of truth, Amen rā lord of heaven."

174. Seated statue of Rameses II.

"The good god, son of Ptah, beloved of Sekhet-Bast, Rameses II. Thou art even as Ptah."

20. The series of inscriptions translated above forms almost a *corpus* of the inscriptions of the great temple of Tanis. A few important ones are indeed omitted. The stela of 400 years, for instance, was re-buried by Mariette and could not be found. Some have been previously copied by the learned De Rougé, and his publications of the stelæ are scarcely to be surpassed. But there was still much to be gleaned by Mr. Petrie, and, except where an inscription was inaccessible by any ordinary contrivance, we now have a complete set of those remaining on the ground. Moreover, some entirely new discoveries were made in the Ptolemaic chapels and temples that are of great importance for the geography of the district.

Now that the inscriptions are known *en masse*, it is worth while to see what conclusions may be drawn from them (1) as to the local worship of Tanis, (2) as to the position of Tanis in the political geography of Egypt, (3) as to the history of the kings. I therefore append a few notes on each of these questions.

The local mythology of a city is to be learnt from the dedications of its temples and of the monuments adorning the temples. Often it is found that nearly every monument bears a dedication or an expression of homage to a particular god or goddess brought into connection with a particular geographical name, and the

name of the city and its local worship can then be identified at once. At Tanis the case is very different, and nothing can yet be considered certain with regard to it.

The dedications of the middle kingdom all, with only two exceptions,¹ relate to the deities of Memphis and those of the underworld. Ptah res ānbuf neb ānkh tauī, Ptah nefer her, Uasar neb shetaīt are titles of the deities, which being the chief gods of the capital, were no doubt at that time representative of Lower Egypt. We only learn from this, that if the statues and architraves were originally dedicated in the temple of Tanis,² the mythological position of the city was not at that time prominent enough to force the Pharaohs of the period to venerate the local god by placing his name upon these monuments.

¹ One exception is the obelisk of Nehesi, which I was inclined to attribute to the twenty-second dynasty, but Mr. Petrie has kindly communicated to me his reasons for the earlier attribution. They are (1) that the style of cutting in the hieroglyphs, though rough, is like that of the thirteenth dynasty, and unlike the work of later times, the edges of the signs being sunk deeper than the central parts. (2) That it has been re-used at a later date, and bears no sign of usurping earlier work, as the later inscriptions usually do. (3) He quotes instances from which it seems certain that ∇ was used for *n* in the thirteenth dynasty. (4) He has seen a scarab which bears the name, "royal son Nehesi," in the style of that time. These arguments seem conclusive, and lead to the important result that Set was in some manner recognized at San before the Hyksos invasion. Harshef, the deity of Heracleopolis Magna, appears on the apex. This monument is distinctly dedicated to Set, lord of re ahtu, "the entrance of the fields," which if not actually the name of the district round Tanis, was possibly a designation of the entrance of one of the roads from the eastern desert. The objection that Horus, the conqueror of Set, was more likely to be the guardian and lord of all these roads, does not perhaps apply to all periods of Egyptian history. The same myth may have different sides, and each side may have a time of popularity or of preference by the autocrat. However, *re ahtu* may have been in Upper Egypt: cf. Br. Rec. I. vi.

The other exception is the re-used obelisk of the middle kingdom, in which Hor neb khaskhet appears.

² The large block of limestone inscribed with the name of Usertesen III., as De Rougé, who records it, points out, Mél. l.c., is strong evidence that the monuments of the early dynasties were originally at Tanis, and not brought there at a later period.

After the fall of the native dynasties the Hyksos have left memorials in the temple. The name of the king *Āpepī*, beloved of Set, is the only one now legible. This dedication tells us nothing of value for the local mythology. Set was the especial deity of the Hyksos, and appears on an altar of the period found in Cairo (and therefore, perhaps, from Heliopolis) as "Lord of Avaris."

The nineteenth and twentieth dynasties bring in a flood of divinities. The god of Thebes, the capital of Egypt, holds perhaps the third place, the first being given to *Ptah Tathnen*,¹ with whom Rameses II. continually compares himself. This god was again, perhaps, a form of the Memphite god, and held a very high place in the worship of the king. On an almost equal footing appear the gods of Heliopolis, the emblems of living and conquering royalty. Tum and Harmachis with Shu are the gods to be attributed to the pre-eminent religious influence of that city. *Uatī ap tauī* is brought in owing to her connection with the marsh lands of the Delta, and Horus of the foreigners, or of the desert hills, similarly occurs once in this dynasty.²

Amongst the other gods, while Menthu is often made use of in warlike boasts of Rameses, the only one of any prominence in the dedication is Set, who is called "the very valiant," and once, on a monument of Merenptah, "lord of Avaris." Set was the Hyksos divinity and an Asiatic god, and the kings of the nineteenth dynasty not only bore names compounded with that of Set, but also frequently dedicated monuments to him. It is not reasonable, therefore, from these occasional mentions of Set in the dedication, to conclude that Set was the especial god of the city. Set, lord of Avaris,

appears also in a dedication by Merenptah at Tel Muqdam, Mar. Mon. Div. 63; while if Tanis were Avaris, and Set the especial deity, we should expect to find that the dedications of the nineteenth dynasty in the temple, unless very strongly influenced by other causes, were monopolized entirely by that god.

In the twenty-first dynasty we find no special dedication beyond that to *Āmen rā* as god of the Theban capital. In the twenty-second *Āmen rā* continues. The only exception in or about this period is on the pillar of *Āa ārq rā*, which is of doubtful period. Unfortunately it has not been seen by any one except Mariette; but it seems probable that it belongs to the time between the Ramessides and the Saites rather than to the middle kingdom. The dedication upon this to a goddess *Per . . .* is hard to restore.

I have examined a number of the objects found in the tombs at Zuwelēn by Mr. Petrie. The eyes, &c., are distinctly of the twenty-second dynasty in most cases, while some are twenty-sixth. A scarab from the town? bears the throne name of Osorkon II., which was adopted also by other kings of the same family; and the bones from the jars have been identified as those of cats by Mr. O. Thomas, assistant in the Zoological Department of the British Museum. This throws some light on the condition and religion of Tanis at the period. The ushabti of the priestess of *Āmen Ānkhšnāst* (see Nebesheh, p. 46) must also be of the twenty-first or twenty-second dynasty.

There is a great blank after the twenty-second dynasty, and with the exception of a statue at Bulaq, the only materials for filling it up are the Ptolemaic remains found by Mr. Petrie. These point two ways. The monuments in the chapel are dedicated to the deities of *Āmt*, the capital of the nineteenth nome; the block from the temple is concerned with a black bull, Horus in the city of Bennu. And Bennu was the name of the territory of the fourteenth nome.

¹ Compare the decree of *Ptah Tathnen* or *Tathnen* at Abusimbel (E. Naville, Trans. S.E.A., vol. vii. p. 119, etc.), and below, p. 34, note.

² De Rougé, *Mél. l.c.*, also mentions *Sekhet nebt Ānt*, mistress of the valley, and *Hor āa pehti*, as occurring at *Ṣân*.

The monuments of the chapel must probably give way to the single block from the temple, especially as *Âmt* seems to have been situated at *Nebêsheh*.

The search for a local mythology and really local worship has not been successful. When we have sifted out the national gods who change with the dynasties (the *Ptah*, *Osiris*, and *Sokar* of the middle kingdom; *Set* of the *Hyksos*; *Set*, *Harmachis*, *Tum*, *Tathnen* and *Âmen* of the *Ramessides*; *Âmen* also of the *Bubastites*) there is no residuum left sufficient to certify a local worship. *Set*, *Uati âp tauî*, and *Horus* of the foreigners, wear a semblance of localization. The preference perhaps should be given to the first on the strength of the obelisk of *Nehesi* and the strange monument called the stela of 400 years.¹ *Horus* of the foreigners, on the pair of obelisks of the middle kingdom adopted by *Rameses II.*, is probably local only in a general sense, and proves that the north-east of the Delta was at an early period full of non-Egyptians.

21. The position of *Tanis* in the political geography of Egypt is not much easier to determine. The fact that there was no hard and fast local worship seems to prove that it

¹ Does this not really allude to the victorious introduction of the Syrian *Set* into Lower Egypt by the *Hyksos*, rather than to the era of a king *Nubti*? The supposed *Hyksos* king has not the usual *Râ* in the name. If so it records the four hundredth anniversary of the conquest of Lower Egypt, by which *Set* (or *Nubti*) became king both of Upper and Lower Egypt. It was erected on the order of *Rameses II.* by *Seti*, who was governor of the foreigners and of the fortress of *Tal*

here *Horus* of *Mesen*, the especial enemy of the Asiatic *Set*, was worshipped. It would thus be a sign of the tendency of *Rameses II.* to make a patronizing alliance with the Asiatics and their gods, and his desire to adopt the worship of the foreigners. It was *Rameses II.* and his father *Seti* that first raised the northern Delta from the disgrace into which it had fallen, probably as the seat of growth of the *Hyksos*, and restored its temples.

The head-dress of *Set* on the monument is very curious. The cap is that of Upper Egypt with a lotus flower instead of the uræus, while from the apex hangs a long ribbon or cord, forked at the end which reaches below the knees. It is probably this ribbon that is seen behind the figure of *Set* on the statue of *Merenptah*, son of *Pa mer kau*, from *Nebesheh*.

was not a capital city in the earliest times; the religion of a district or of a family must have fixed itself in their chief settlement in times of extreme antiquity, and the centre of a cult seems to have continued by a natural process as the centre of a district and the capital of a nome: although after the overthrow of old traditions at and before the *Hyksos* period, and the neglect of the temples of Lower Egypt by the succeeding native dynasty, the nineteenth dynasty seems to have made a new distribution to some extent, traces of which appear in the list of *Rameses II.* in the temple of *Memphis*, while other lists of the same period follow the earlier lines.

It seems very probable that *Brugsch* was right in identifying *Tanis* with the royal city of *Pa Rāmessu mer âmen*. Its temple was filled with the name and monuments of *Rameses II.*, who erected in it to represent himself the largest monolith statue in the world. No city but, perhaps, *Thebes*, *Memphis*, and *Heliopolis* can have shown such a monument of his reign as this temple itself formed.

If this be granted, *Rameses* seems to have planted one of his capitals not in a religious centre, but in a position the importance of which had been noted by the Pharaohs of the middle kingdom, and close to the very centre of the *Hyksos* rule—a position which commanded the northern route to Syria and placed the king after the conquest of that country in easy communication with all his dominions.¹

There was no strong local cult, and *Rameses* in renewing the temple, which had no doubt been entirely neglected since the *Hyksos* rule, introduced the worship of the gods who pleased him most. *Ptah Tathnen* of *Memphis*, *Harmachis* and *Tum* of *Heliopolis*, *Âmen* of *Thebes*,

¹ The inscription of *Abusimbel* (published by *Ed. Naville*, *Trans. S.B.A.*, vol. vii. pl. i. p. 119, &c.) says appropriately that it was built "to strengthen the two lands of Egypt" (see l. 16 of the stela), and it is evidently counted as one of the most important achievements of the king.

held the chief places. A chapel was given to Set āa pehti or Sutekh, the Hyksos god, and much honour shown to him. Thoth of Hermopolis also probably had a chapel, and certainly an altar.

We must recollect that the limestone walls have entirely disappeared, and that while occasionally limestone monuments were saved by being covered up with rubbish, we have only a portion of the decorations of the temple to assist us in our researches, and practically none of the temple itself. There is a fragment of a local name, no doubt of the name of Tanis, in Inscription 114. It perhaps preserves a portion of the sign ḥa, "house," i.e. of Rameses II. The name of the city of Rameses II. occurs on the Roman or Ptolemaic statues of Teos, from San, in the Bulaq Museum, and therefore remained to a very late period.¹

That Tanis was Avaris is not probable. As to the Biblical Rameses: the land of Rameses in which the Israelites were settled, Gen. xlvii. 11, was approximately the same as Goshen, v. 6. There is also the store-city Rameses or Raamses, Ex. i. 11. If the land of Rameses, which was "the best of the land," means the district of the city of Rameses, then the latter must be sought for near Goshen. If, however, the district is not connected with the city, then Tanis—Pa Ramessu mer amen—Pa Rames is probably Raamses. Cf. M. Naville's "Goshen," especially pp. 17 and 20.

There is also the question whether Rameses, from which the Israelites started, was the city or the district. From Tanis to Tel el Mas-khuta (Pithom) the distance in a straight line is thirty miles, and would be at least two days' journey for the mixed multitude.

In all probability Tanis was the royal city in

the field of Zoan where, according to Exodus and Psalm lxxviii. v. 43, Moses performed the miracles before Pharaoh.

That Tanis was considered to belong to the district of the fourteenth nome may be considered nearly certain. In Roman times it seems to have been the capital of a separate nome, the Tanite, with the worship of the same hawk god as the fourteenth. This separate nome has not been identified in the Ptolemaic lists, and on the blocks of the temple built by the Greek dynasty the city seems to have the name of Bennu, the name that the territory of the fourteenth nome bears in the lists. The capital, i.e. the religious centre, at that time was still Tāl, which probably lay at Tell Belīm. Tāl remained a nome capita also in the Roman period, but its district was then only the Sethroite nome, outside the arms of the Nile.

There are still many questions to be settled in this region. Let us hope that the papyri of Tanis will help us out of some of the difficulties.

22. Historically, one looks for light from the sum total of these inscriptions on the question of the Tanite dynasties. But not much is to be obtained from the monuments. The evidence of the preference for Amen rā, king of the gods, is in favour of the hypothesis that the Theban and the Tanite kings of the twenty-first dynasty were identical, and that Thebes was their original home, Tanis being only adopted as their chief seat in Lower Egypt, as seems to have been the case with Bubastis under the succeeding dynasty. There is no trace at Tanis of the XXIII. dynasty, which Africanus calls Tanite.

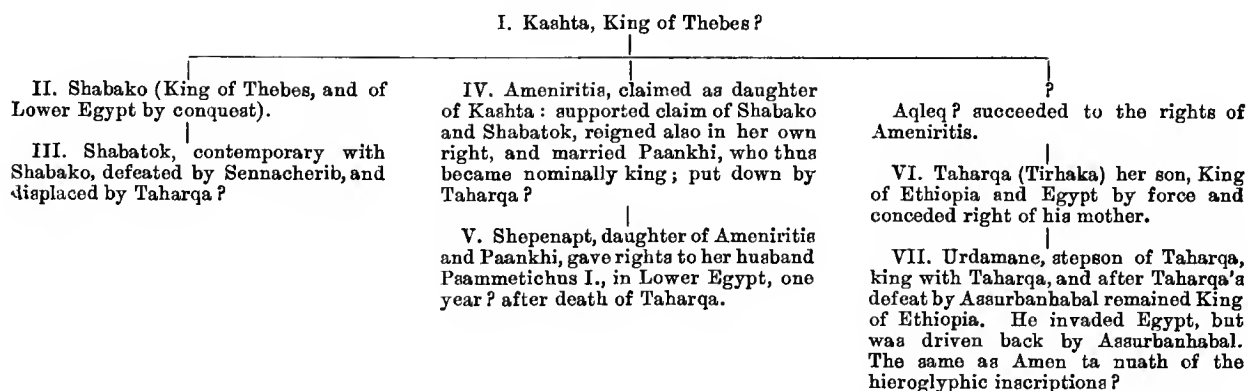
The early monuments of Tanis are provokingly suggestive of having been brought by Rameses II. to adorn his new capital. It has never been absolutely proved that this was not done. The truth about the age of Tanis can only be ascertained when deep excavations are made in the mound itself or a sufficient examination of the extensive cemeteries has been carried out.

¹ The inscription mentions Amen of Rameses in Pa Rames (i.e. Pa ramessu mer amen). Other geographical names are *Khent ābt*, name of the sixteenth nome, Tar its capital, *Mesen nut āat*, "the great city," *āatu nu seḫet t'an*, "villages in the fields of Zoan."

The latter are in danger of being entirely worked out by the Arabs before the explorer comes upon the ground.¹ The Saite kings may have built a separate temple in the city. Only one monument later than Taharqa seems to have existed in the great temple; but the site was at least inhabited then, for Mr. Petrie found the cartouche of Psammetikhos II. on a porcelain disk. The decree of Canopus must have been placed in a Ptolemaic temple on almost the same ground as the great temple.

The stela of Taharqa is an important monument, and it is very unfortunate that it is not more perfect. It is probable that the stela is not only a record of the visit of the queen-

mother to Tanis, and of the submission of the people to her and her son, but is also intended to put forth the claims of Taharqa to the throne by recounting the king's early favours to him, and then the nomination of his mother as queen-mother. The stela throws a good deal of light on the family of Taharqa. It is clear that he belonged to the royal stock, but was not in the direct succession, and no doubt he gained his throne chiefly through Shabatok's defeat and his own success in the Assyrian war. A feud in the family is hinted at in the comparison of Taharqa to Horus, and the following genealogical table is probably not far from the truth:—



That the five members of the families of Shabako and Ameniritis held together and reigned contemporaneously is rendered probable by their names being found upon one stela at Turin. Ameniritis is also found in conjunction with Shabako. Their monuments never mention the family of Taharqa, and those of Taharqa are silent about them.

There is a point worth noting about the queen of Ptolemy Philadelphos. In Lower

Egypt she appears to have had a second royal oval, and she bore in addition to the usual titles of the queens, the regal title Net, implying sovereignty over Lower Egypt. This adds another to the list of honours paid her by the king. The title Net was not found at Pithom, but appears plainly on the two stelæ of San.

¹ In 1884, Mr. Petrie made some trials at Zuvelên at a time when he was taking the first steps in obtaining those dated series of common objects which have already altered the whole aspect of an excavation to those who pursue the study. As long as the cemeteries of Tanis can wait, his method will attain greater precision year by year; but destruction of tombs for the sake of amulets to sell to dealers and travellers is going on at a terrible rate throughout Egypt.

It is important, now that the "Livre des Rois" of MM. Brugsch and Bouriant is in the hands of so many who take an interest in Egyptology, to point out that the king's name, Sa Menthu, which is retained there, does not really exist. M. Naville (*Insc. Historique de Pinodjem III.*, p. 16) showed that all the monuments on which Sa Menthu was supposed

to occur, really bore the name Saâmen, and with Wiedemann drew the conclusion that Saâmen of Tanis and other places was the same as Herhor Saâmen of Thebes.

M. Naville, in a private letter to me, states that he finds it difficult to explain the discovery at San of the Ptolemaic tablets in the chapel, unless Tanis was in the nome of Âm peh at that period; and since the blocks of the Ptolemaic temple, which bear the name of Benu, may merely form part of a nome list, he thinks it is most probable that Tanis was a second principal city in the same nome with Nebêsheh.

I had considered this possibility before, but rejected it for two reasons. Of the supposed nome list, the only city name that has survived is Benu, the territory and capital of a nome to which strong arguments point independently as being the Tanite. This would at least be a

wonderful coincidence. Moreover, the capital of the fourteenth nome is referred to again under the name of T'al on the tablet No. 168, and of Meseu on the statue from the temple, 167, as well as on the statues of Teos, which omit all reference to the gods of Amt.

M. Naville also makes the interesting remark that neither of the nomes of Âm, that is, of Nebêsheh and Bubastis, occur in the lists of Seti I. at Abydos, and suggests that these nomes may not have been organized at the time. It may be said, however, that the East of the Delta seems to have been more honoured by the early kings than the West. Possibly the architects of Seti I. lacked space for the full list, and had to be content to omit those nomes which, like Athribis and many of the Eastern nomes, came late in their arrangement of the list.

In "Tanis I." the following corrections can now be made:—

- P. 6, col. 1, l. 5, the statue is of Usertesen I. (above, p. 16).
 P. 6, col. 2, l. 18, the statue is also of Usertesen I. (above, p. 17).
 P. 15, col. 2, l. 10, *for* Ramessu II. *read* Osorkon II. (above, p. 21).
 P. 15, col. 2, ll. 11 and 13 from below, *for* Amenemhat II. and Usertesen III. *read* Usertesen I.

- Pl. xiii., 3 and 4, Usertesen I.
 Pl. xiv., 3, Osorkon II.
 Pl. xv., 3, is of a later Ptolemy; so also p. 32, l. 8 (above, p. 30).
 Index of Pl. xii., 1, Usertesen I.†

ADDENDA TO THE TRANSLATIONS.


M. Maspero has kindly written to me in reply to some questions about the stela of Taharqa. After some important remarks of which I have availed myself in correcting the genealogy, as well as a point which I have noted in the translation, he concludes by saying:—


“Kashta est roi de Thèbes probablement mais non d'Égypte. Il me paraît certain qu'après l'expédition de Piankhi Miamoun la Thébàide resta un fief de l'Éthiopie, indépendante de la dynastie qui régnait dans le Delta.”

The squeezes of this stela, which had gone astray, have at the last moment been found. After a very careful examination of them I can make the following corrections in the Plate (ix. No. 163):—

1. 1. For  read .  is very doubtful.



1. 4.      .


1. 5. There are several indistinct signs beneath .





1. 6.  After *benu* there is nothing distinct.



1. 7. Last part very indistinct.


1. 9.   ; etc.


1. 11. The first parts looks like   (*sic*).

1. 12. .

1. 13.   *r ta meh*;  .

1. 18.  . I doubt whether the ends of all the lines are not broken away.

1. 22. .

1. 23.  .

Some other slight alterations will suggest themselves as probable, although they cannot be confirmed by the stela.

NUMBERING OF PLANS AND INSCRIPTIONS.

The general arrangements of the numbering have been fully stated in Part I. (see fly-leaf before the inscription plates); hence it is only needful here to give the list of numbers of blocks on the plan, with corresponding numbers of inscriptions on those blocks, so as to enable any one to find the inscription of any given stone.

| Plan. | In- script. | Plan. | In- script. | Plan. | In- script. | Plan. | In- script. | Plan. | In- script. |
|-------|----------------|-------|----------------|-------|----------------|-------|-------------------|---------------|-----------------|
| 7 | 33 | 59 | 49 | 100 | 147 | 147 | 123 | 204 | 106 |
| 8 | 80 | 60 | 26 | 101 | 4 | 152 | { 24 | 206 | 105 |
| 9 | 34 | 61 | 27 | 102 | 16 | | { 122 | 208 | 19 _B |
| 10 | 43 | 62 | 52 | 103 | 3 | 155 | 121 | 211 | 69 |
| 11 | 161 | 63 | 68 | 104 | 144 | 158 | 142 | 212, 213, 101 | |
| 12 | 157 | 65 | 134 | 105 | 66 | 159 | 120 | 214 | 82 |
| 13 | 158 | 66 | 135 | 106 | 137 | 160 | 150 | 215 | 77 |
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(Errata in plan numbers attached to plates of Tanis I. : Inscrip. 32 should read *plan* 19; Inscrip. 45 should read *plan* 43.)

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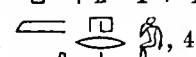

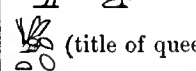
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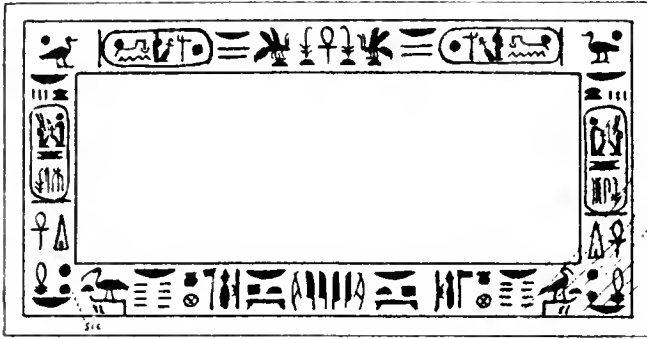
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SAN RAMESSU II.

1:12

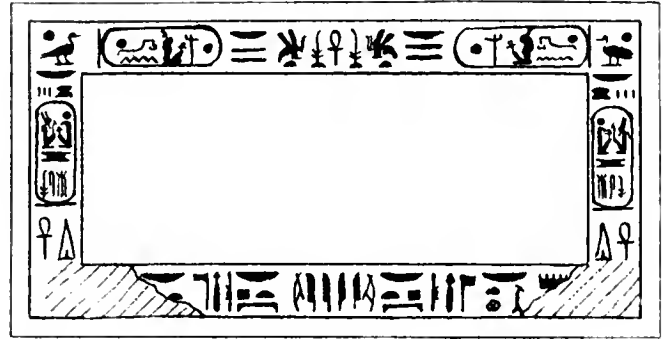
White limestone Altars.

66.



plan 105

67.

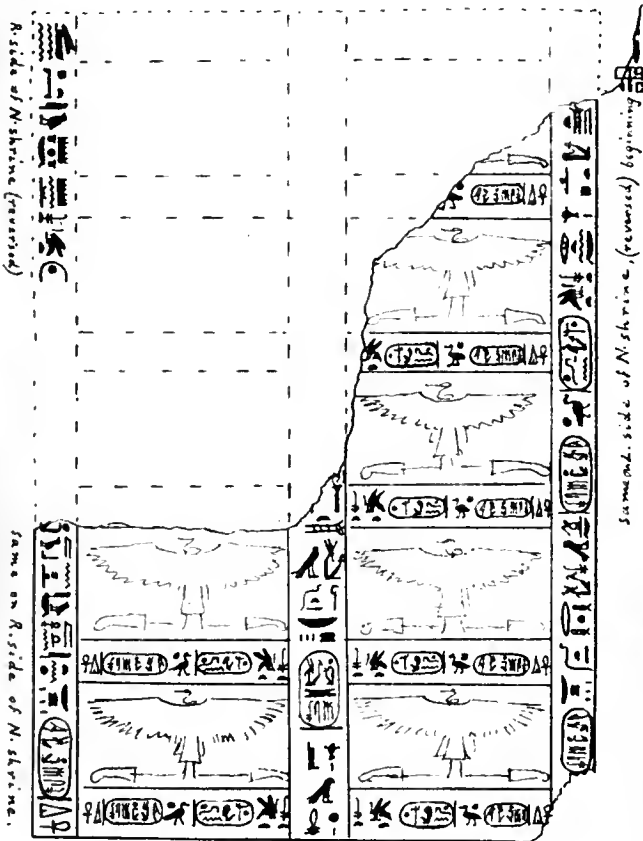


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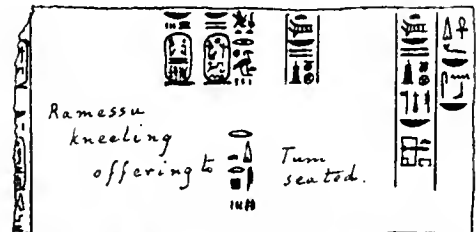
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Sandstone shrines.

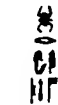
68.



N. shrine, plan 80; S. shrine, 63.

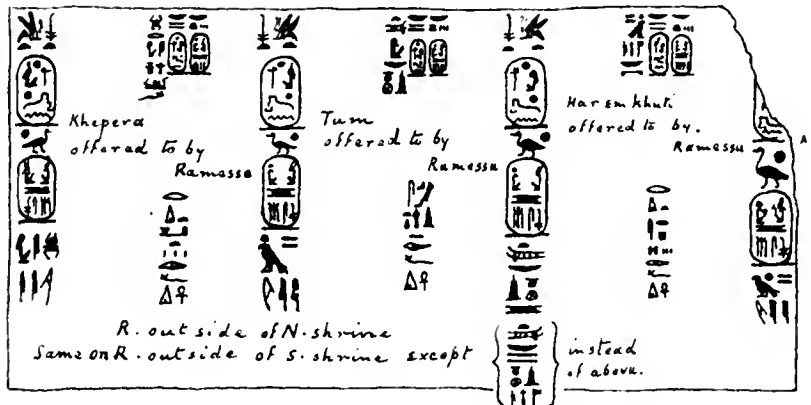


R. inside of N. shrine and S. shrine.

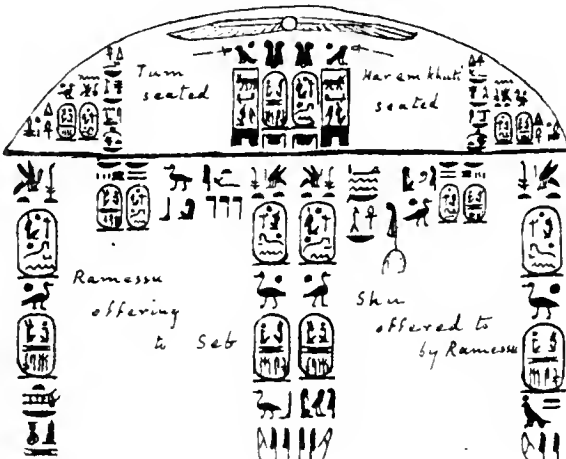


Khopra seated offered to by Ramessu (Nearly all broken away)

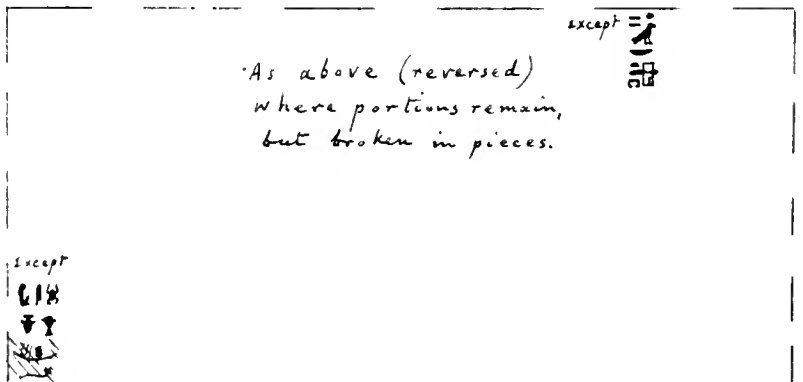
L. inside of N. shrine and S. shrine.



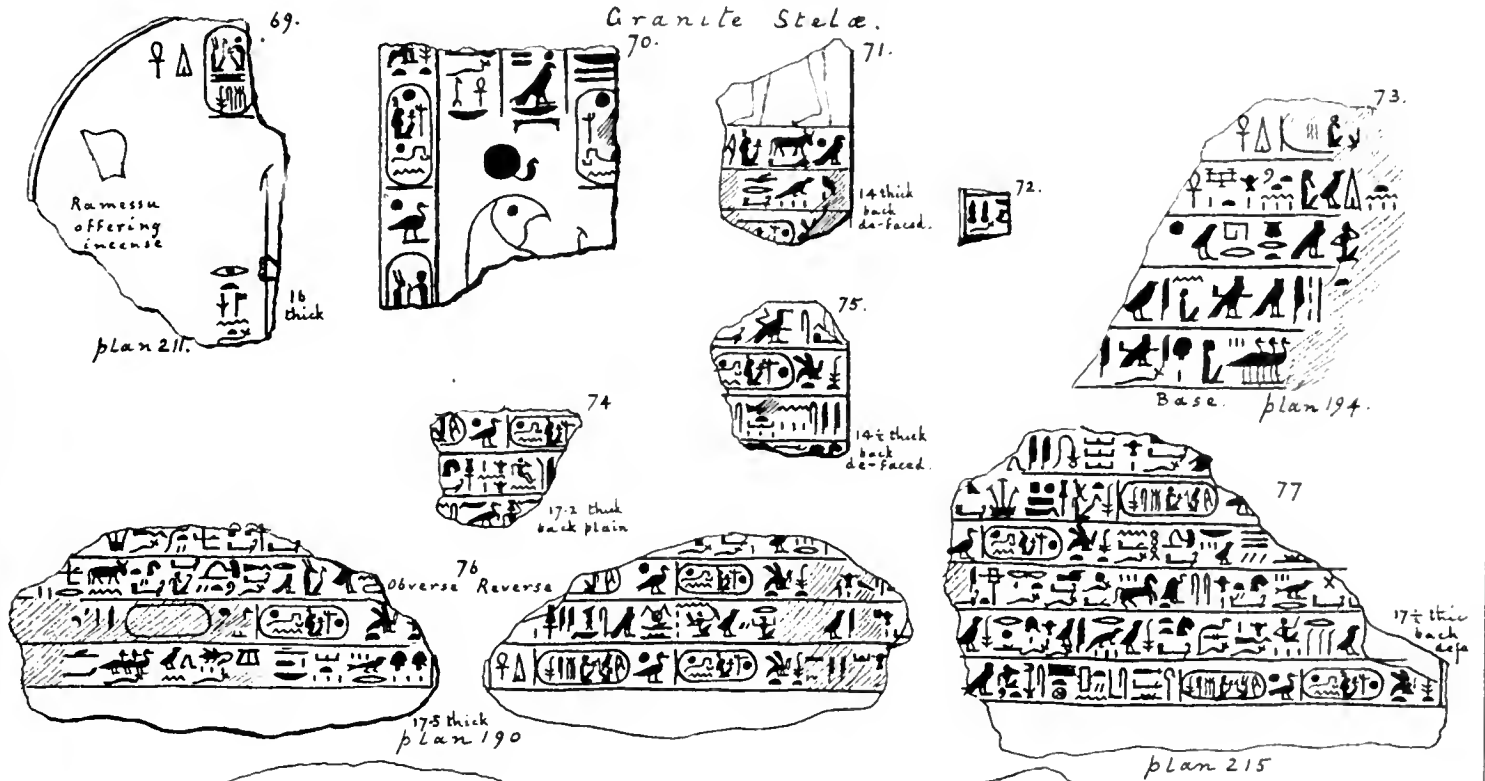
R. outside of N. shrine
Same on R. outside of S. shrine except { } instead of above.



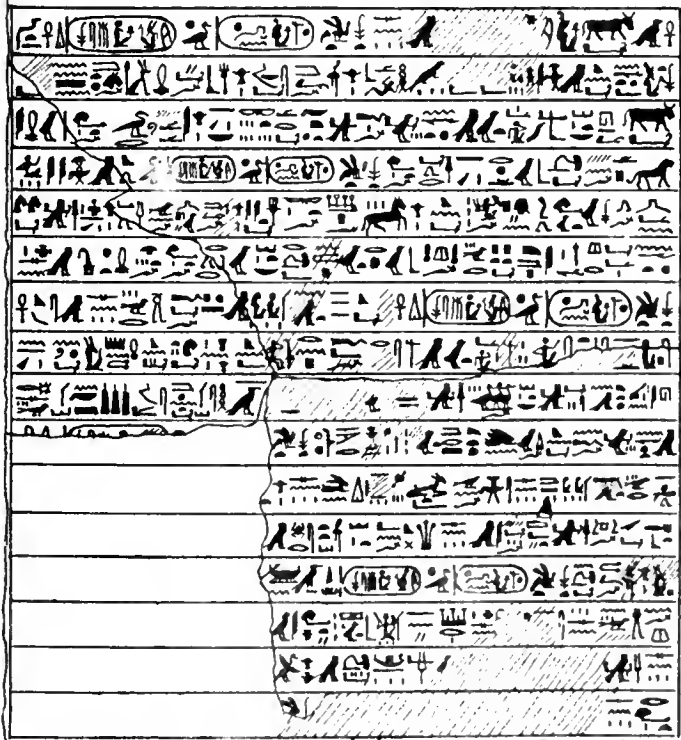
Back of N. shrine.



L. outside of N. shrine and of S. shrine



Ramessu
offering to
two deities.
(Much decayed)

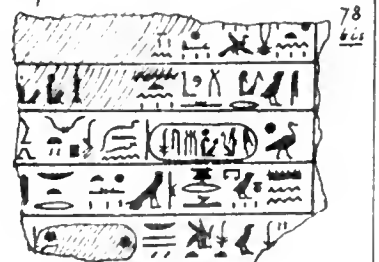


see foreground of photograph, part I, pl. XIV fig. 5. plan 196.

Ramessu
offering to
two deities.
(Much decayed)

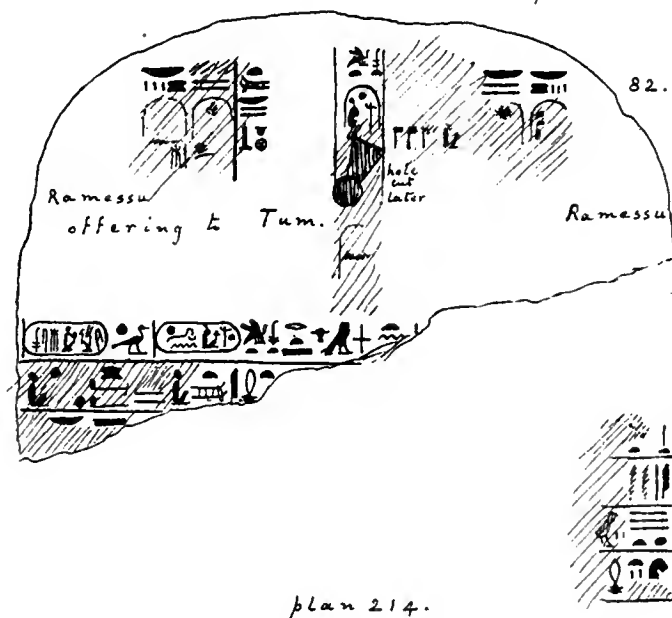
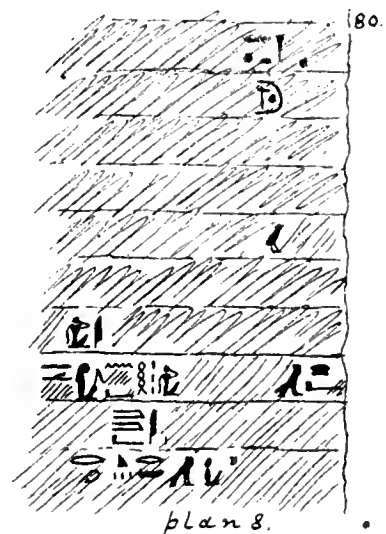
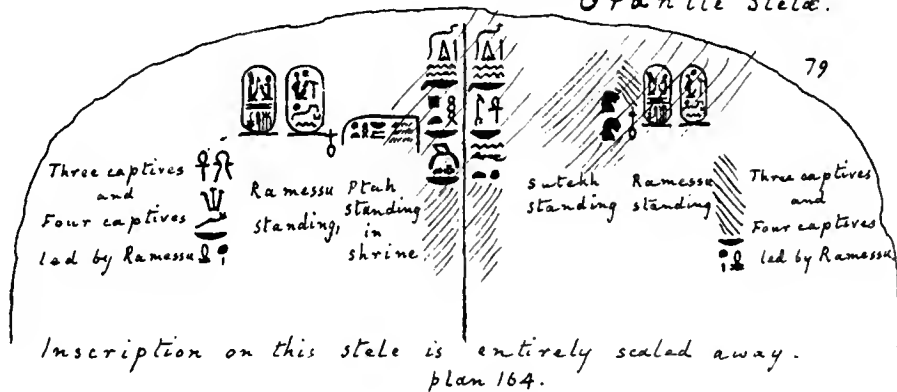


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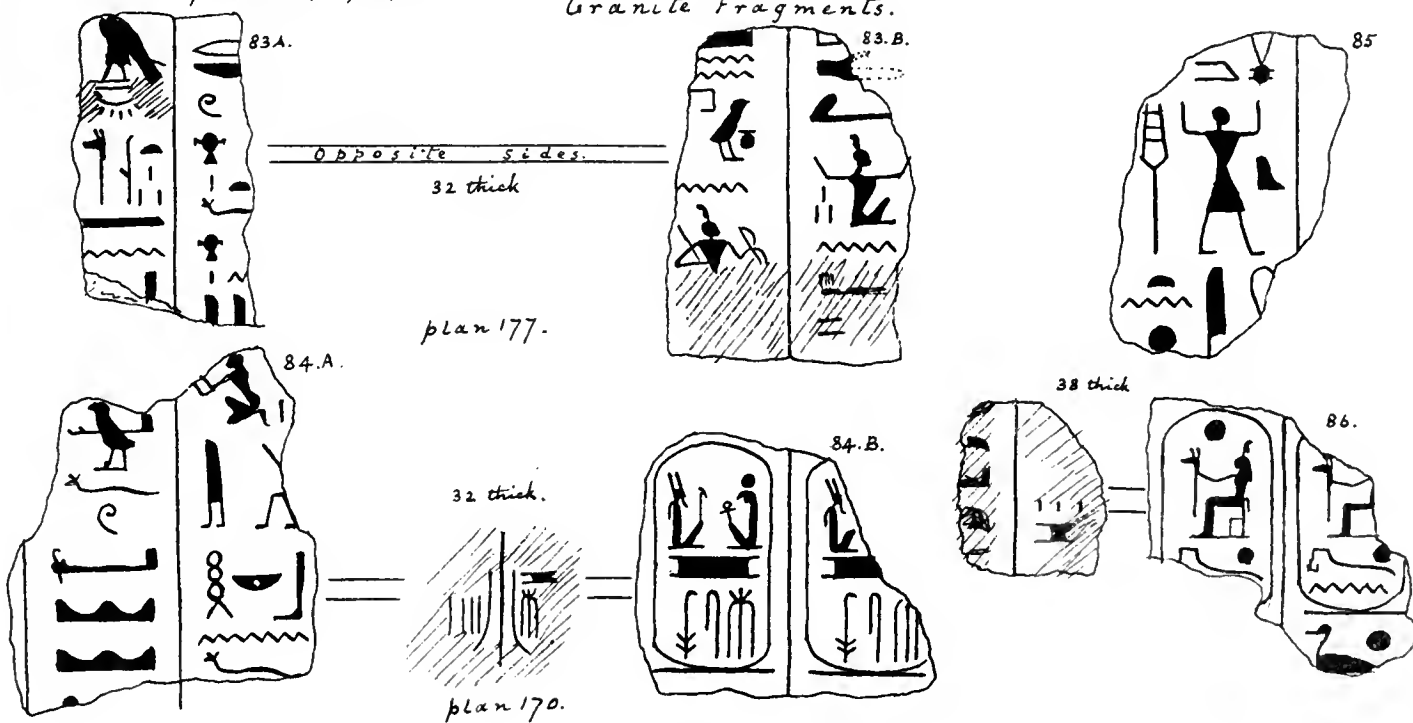


plan 201.

Granite Stela.



Granite fragments.



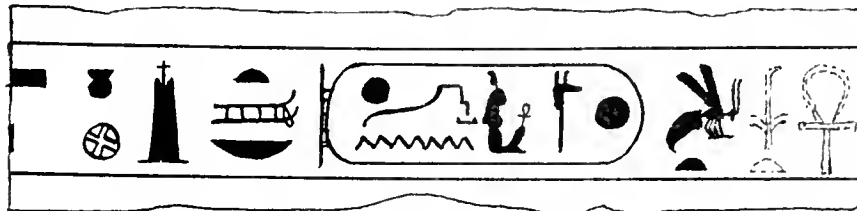
Granite architraves.



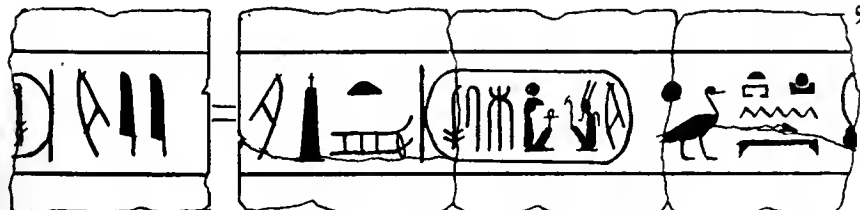
plan 264.



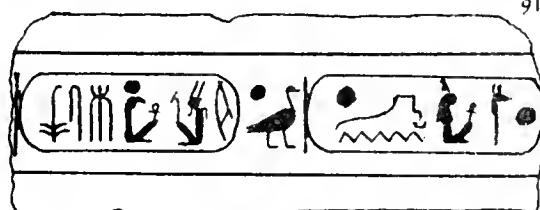
plan 262



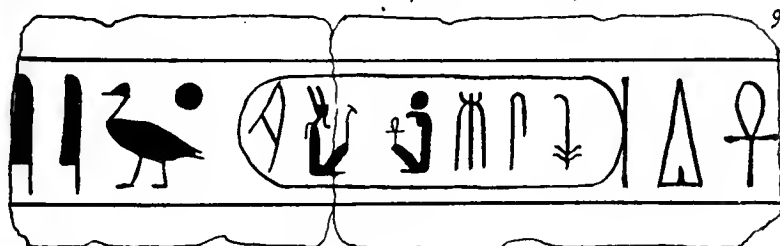
plan 247.



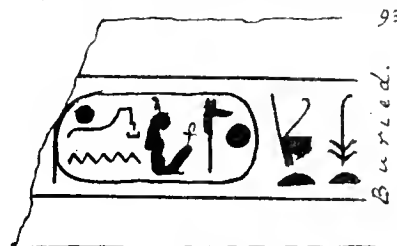
plan 238-239-240.



plan, under 21.



plan 195, 200.



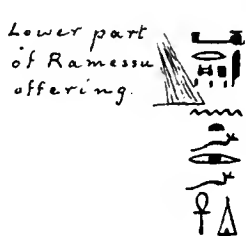
plan 25

Portions of Granite Sanctuary.

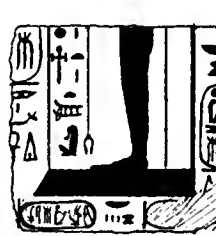


plan 228

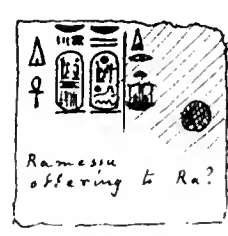
Ramessu offering a figure of Ma.



Lower part of Ramessu offering.

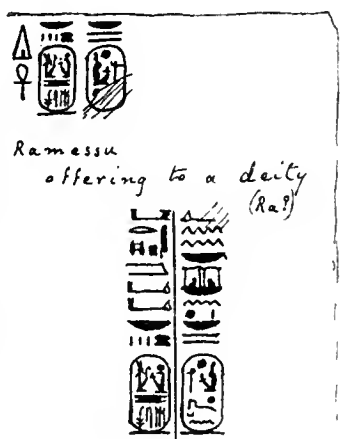


plan 229



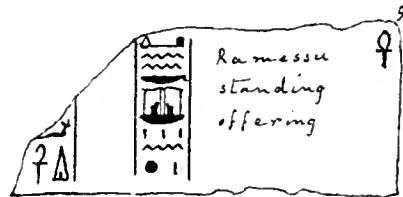
Ramessu offering to Ra?

plan 179



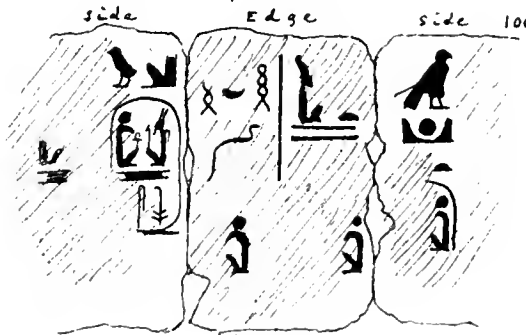
Ramessu offering to a deity (Ra?)

plan 169



Ramessu standing offering

plan 219



plan 220

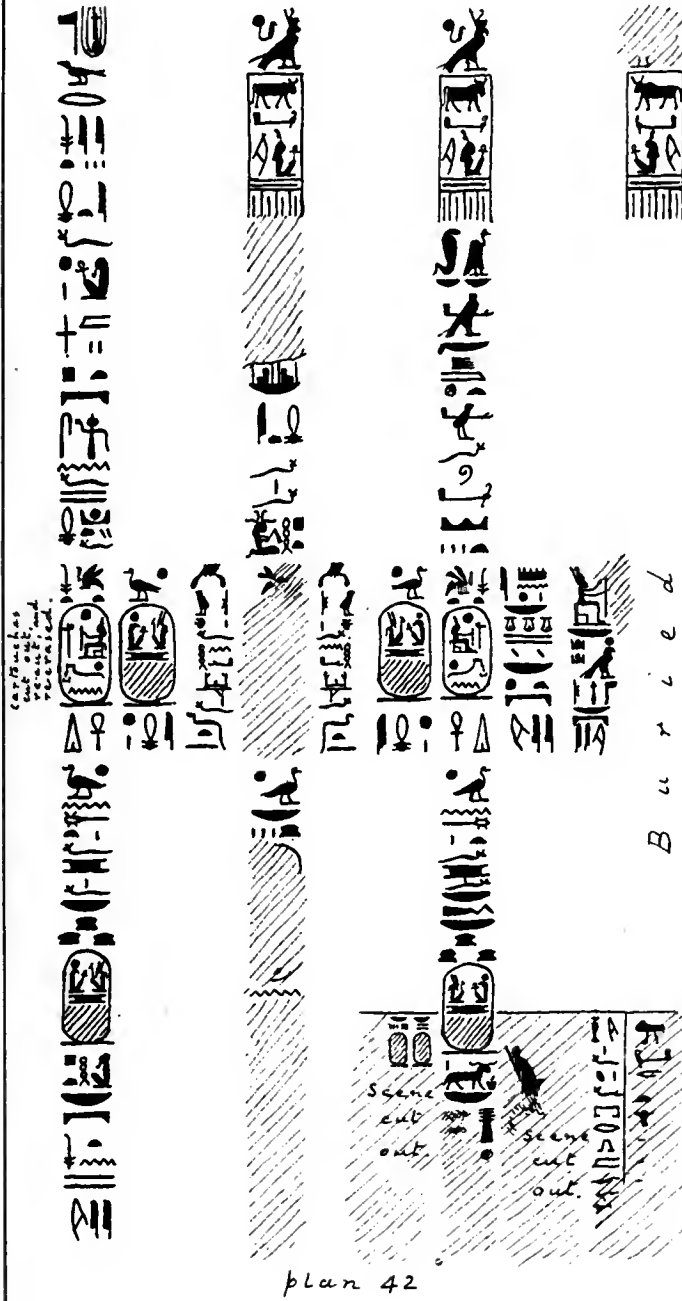


Ramessu offering

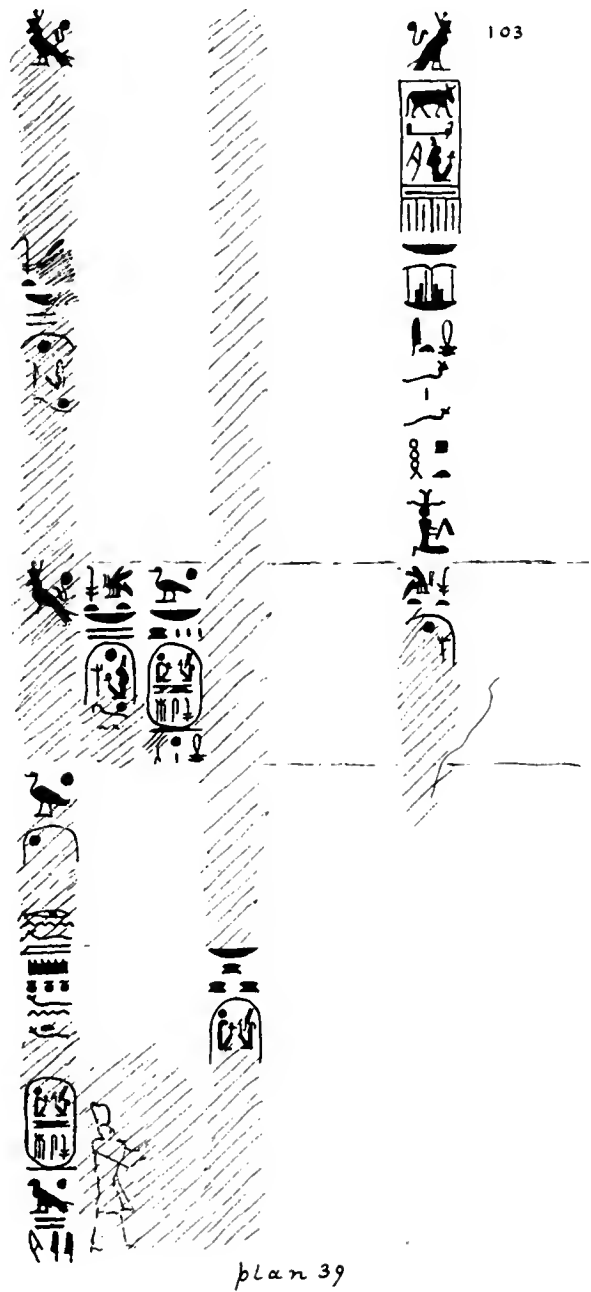
Turn standing

212 plan also 213 plan with other side of scene see right side photo part I, pl. XIV, No 5.

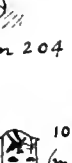
Granite columns.



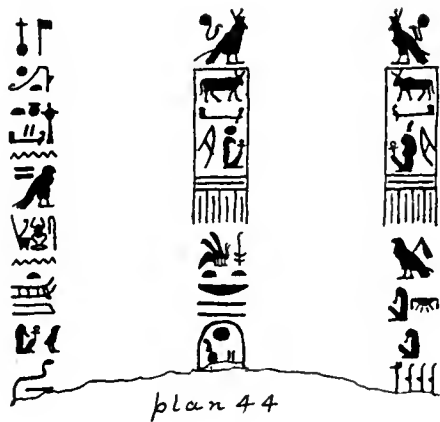
102



103



104



105



106



107

38 diam.



108

(mortar in hollows)



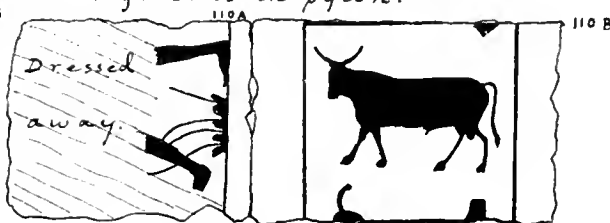
Side of a doorway.



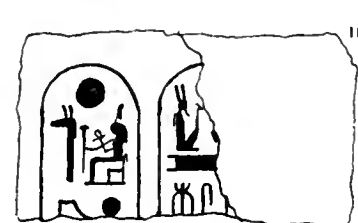
plan 134.



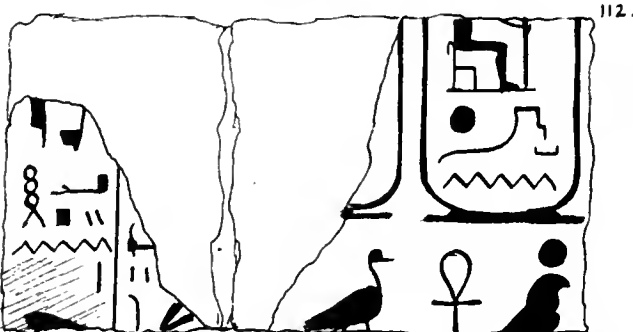
Fragments in pylon.



plan 34.



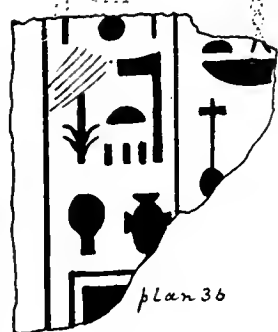
plan 28



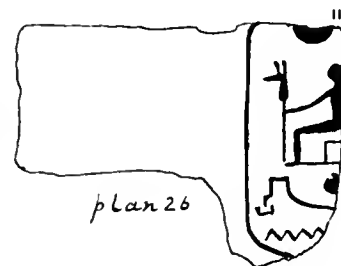
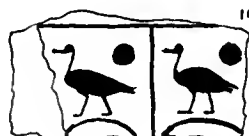
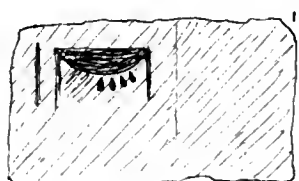
plan 33



plan 29



plan 36



plan 26

Miscellaneous Granite Blocks.



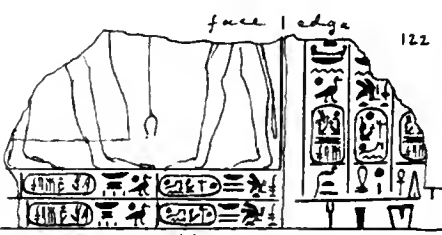
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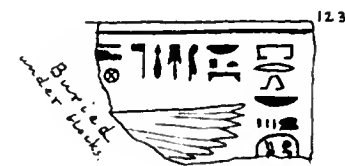
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plan 155



plan 152



plan 147.



plan 144.



plan 121

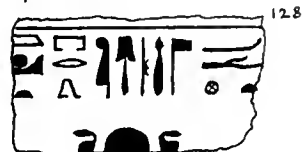


plan 139



plan 130

plan 127
 Nearly half another lintel, R. side 124
 49x25
 Another half lintel 50x26 L. side 129
 Another half lintel 60x23 R. side 128



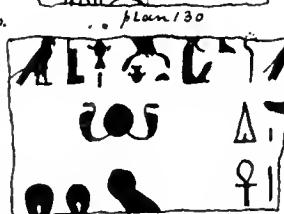
plan 125



plan 112



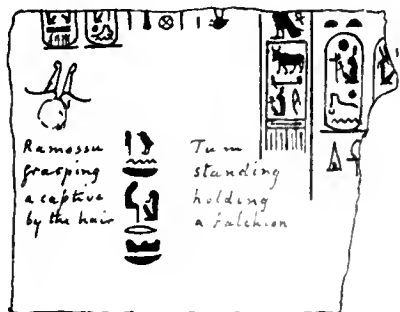
plan 111



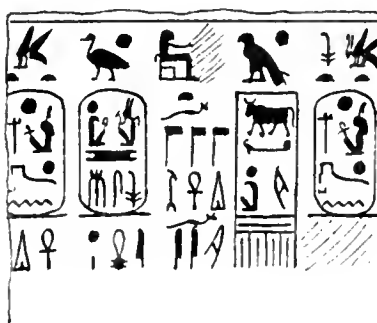
plan 108



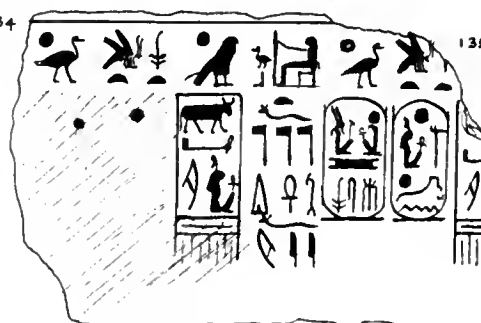
plan 109 under side



plan 52

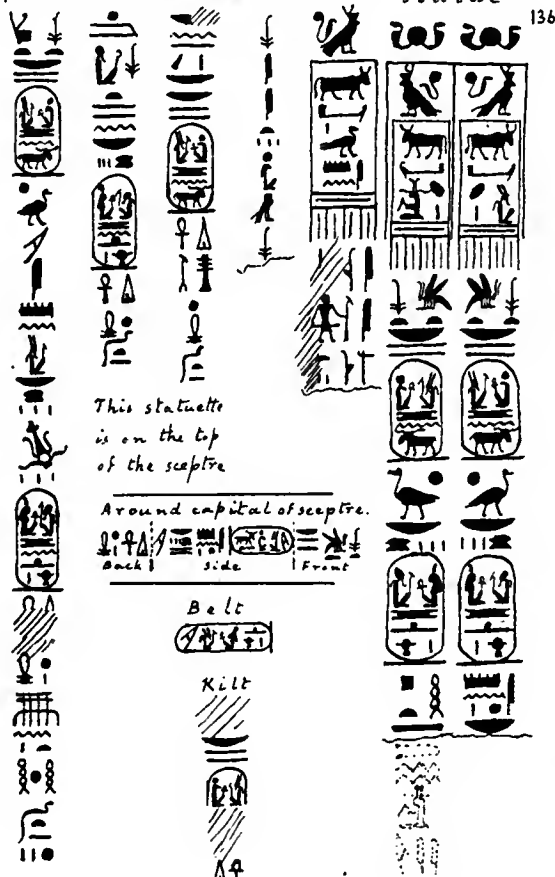


plan 65



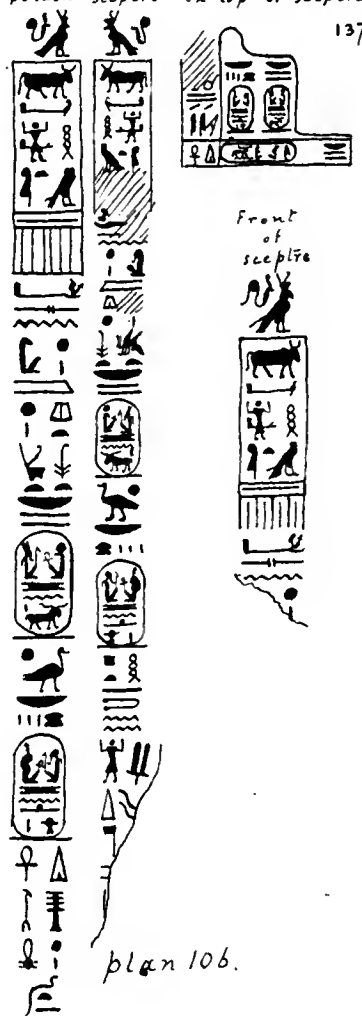
plan 66.

Merenptah, standing statue.

R. side Side of Back of Outside Front
piliaster piliaster of statuette of sceptreBack of
statue

plan 70. grey granite.

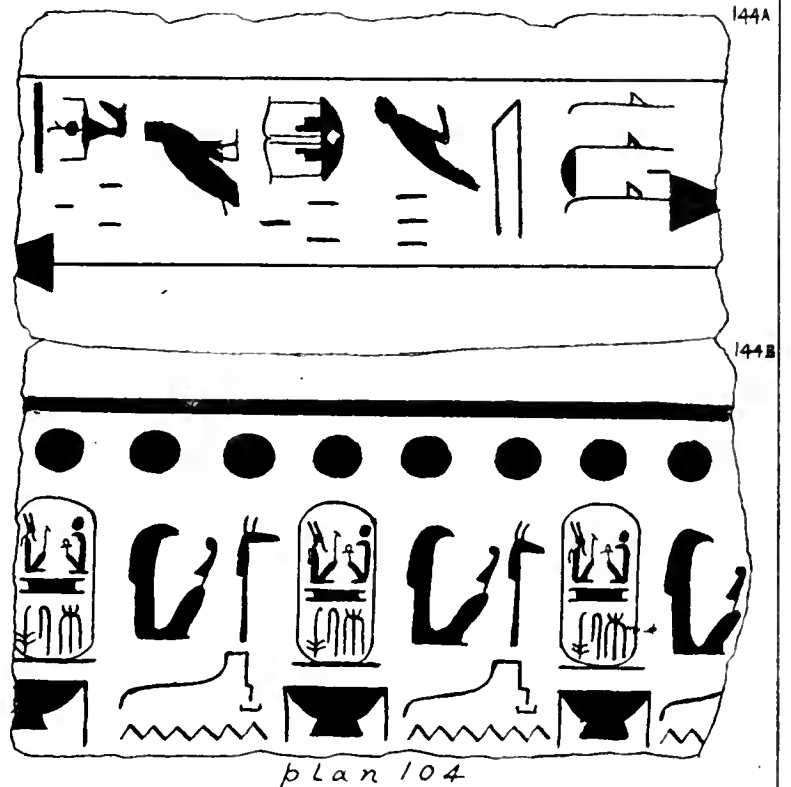
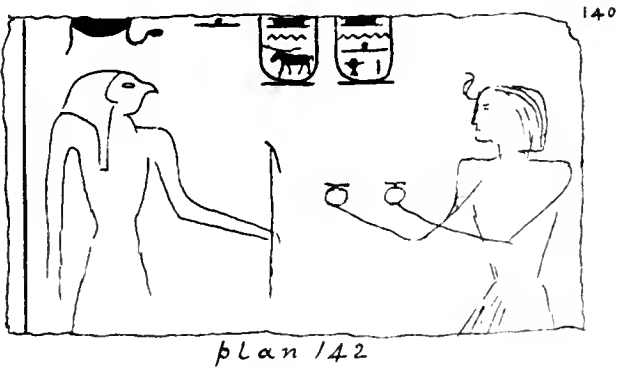
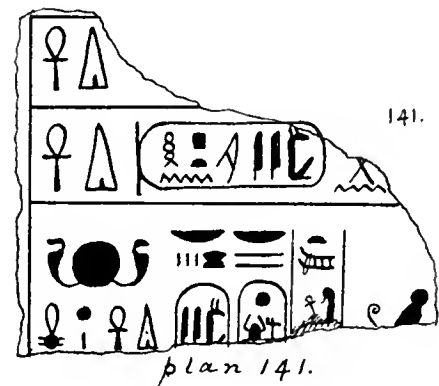
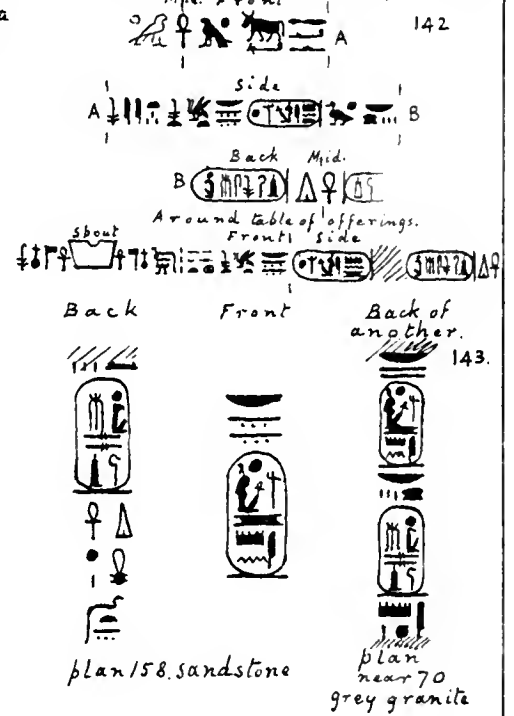
Merenptah, standing statue

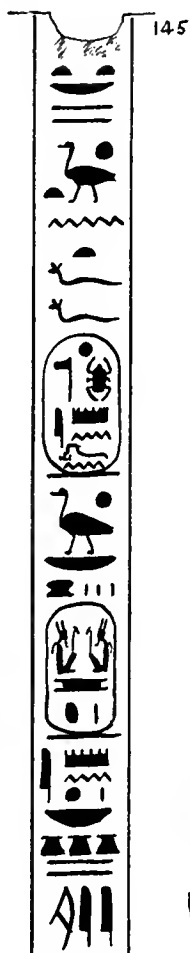
Side of Side of Side of throne of statuette
piliaster sceptre on top of sceptre

Ramessu III, kneeling statue.

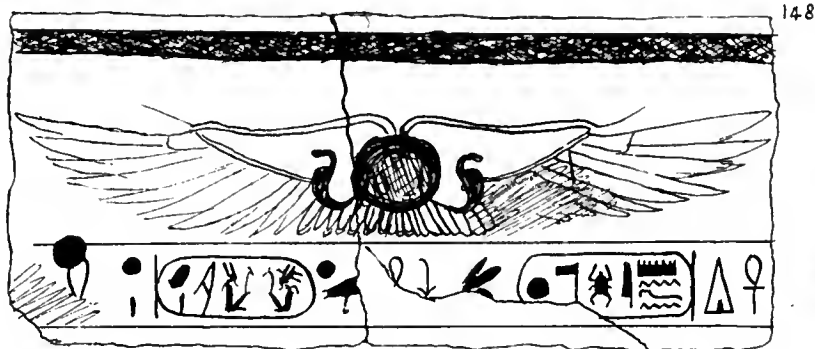
Mid. Front

142





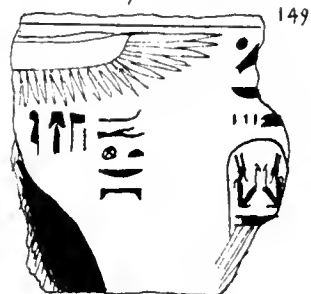
plan 236.



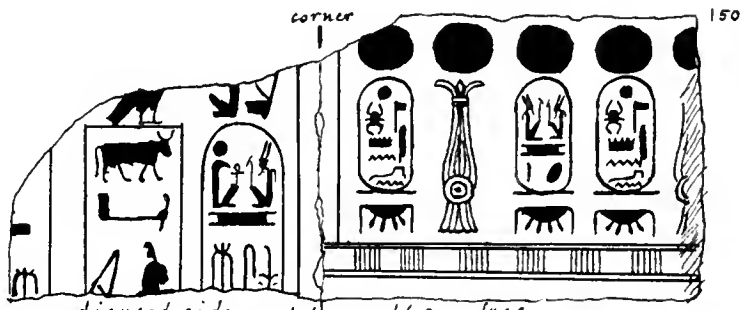
plan 138



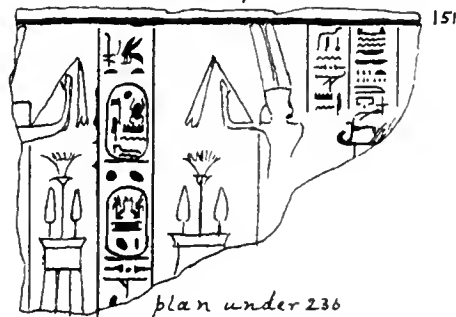
plan 100



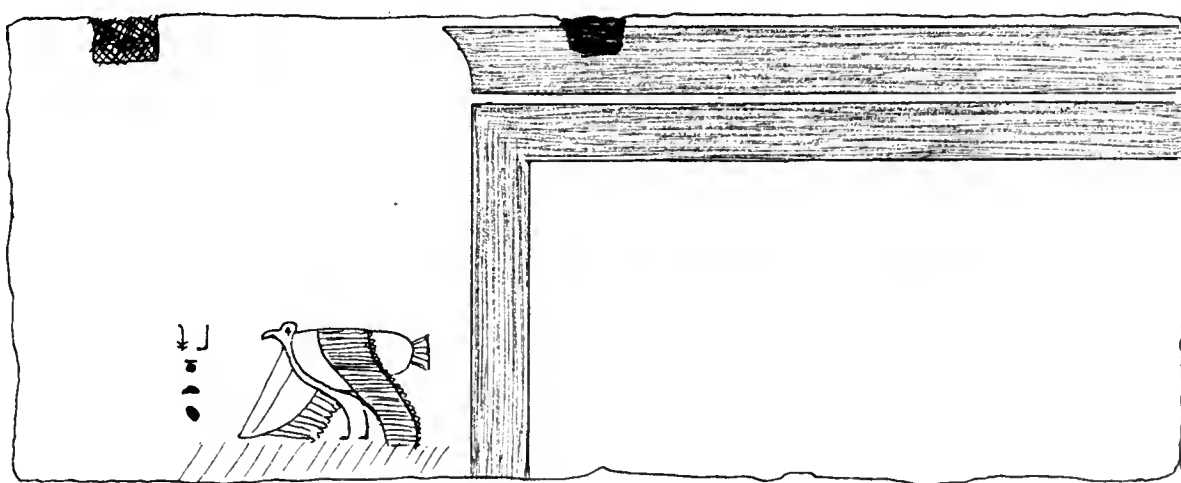
plan 122



disused side. plan 160 face



plan under 236

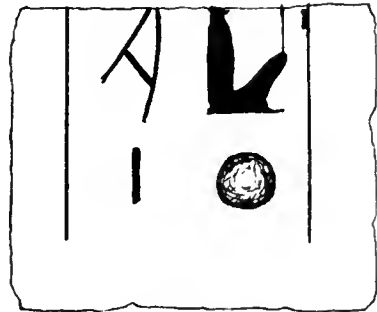


plan 38.

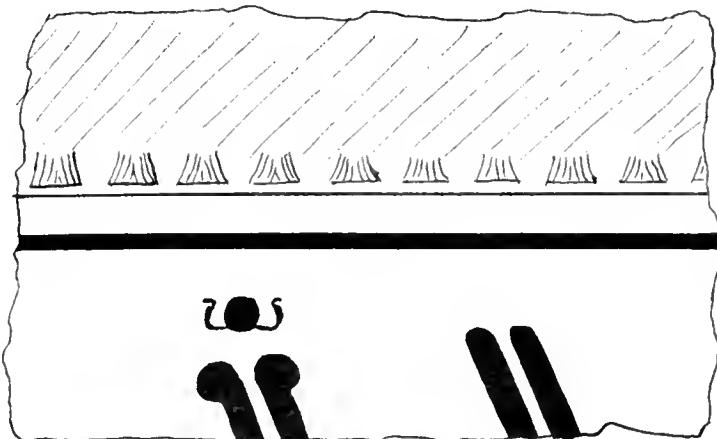


plan 175

153
Other side
cartouches
of Siamon
as No 150



plan 116

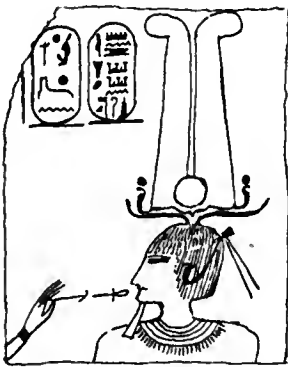


pylon



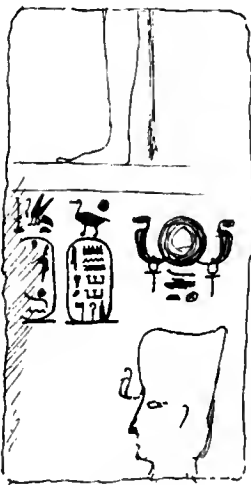
pylon.

1:25



plan 12.

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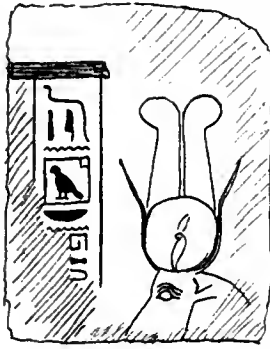


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158

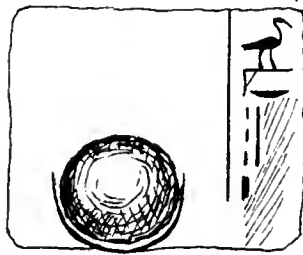
1:6

163



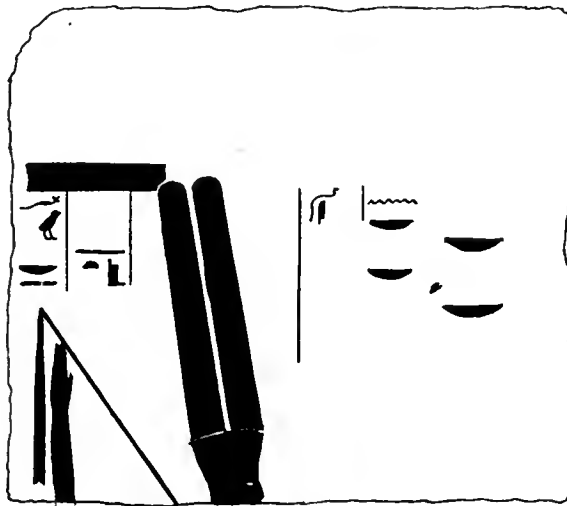
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plan 18

160



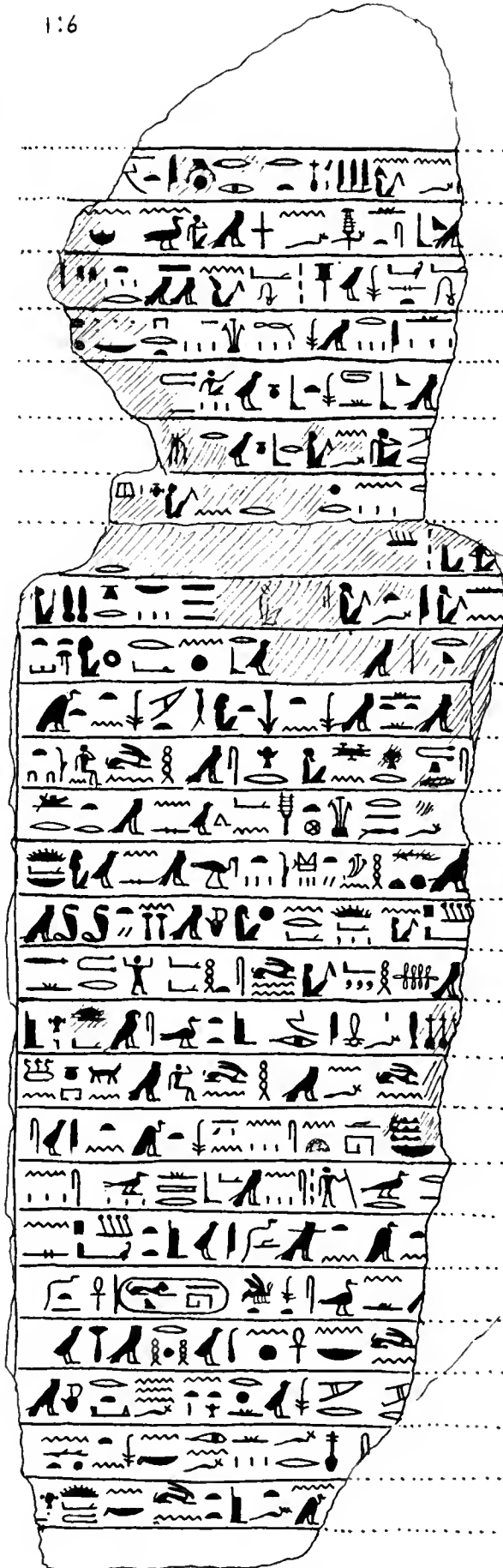
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161

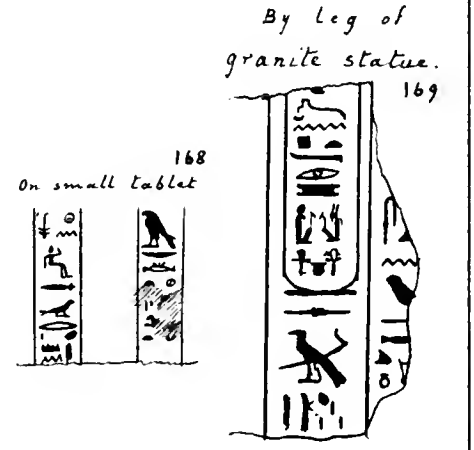
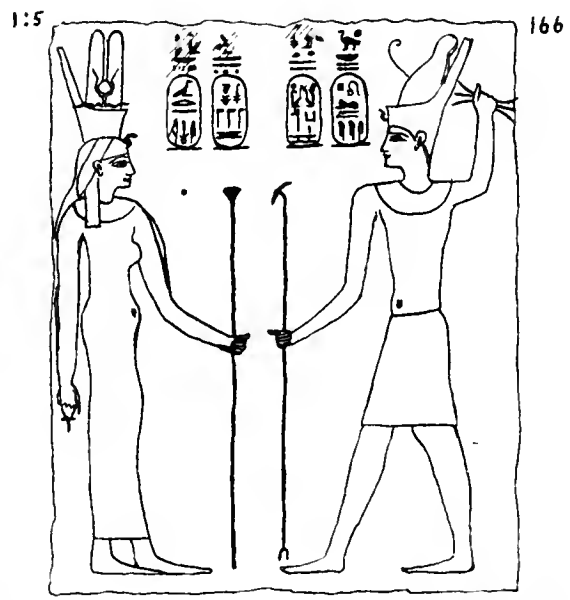
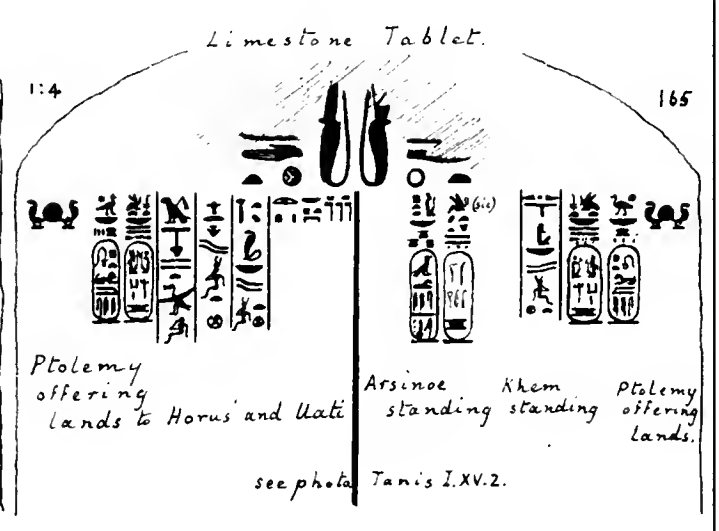
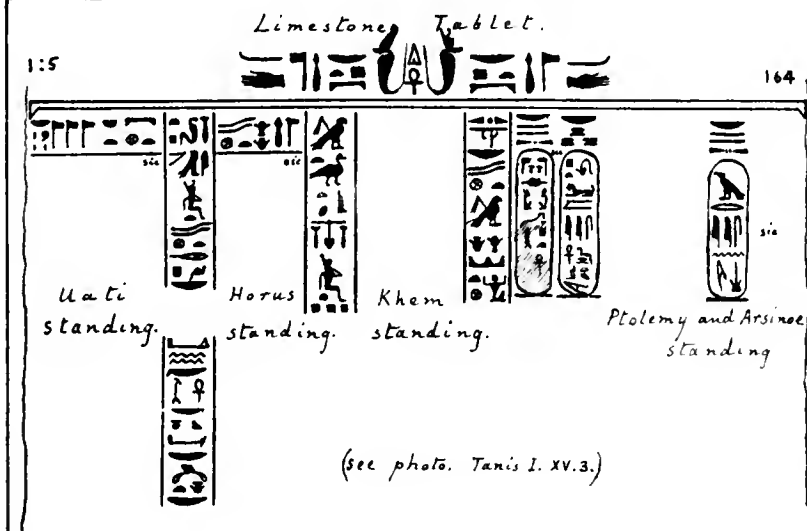


plan 15

162



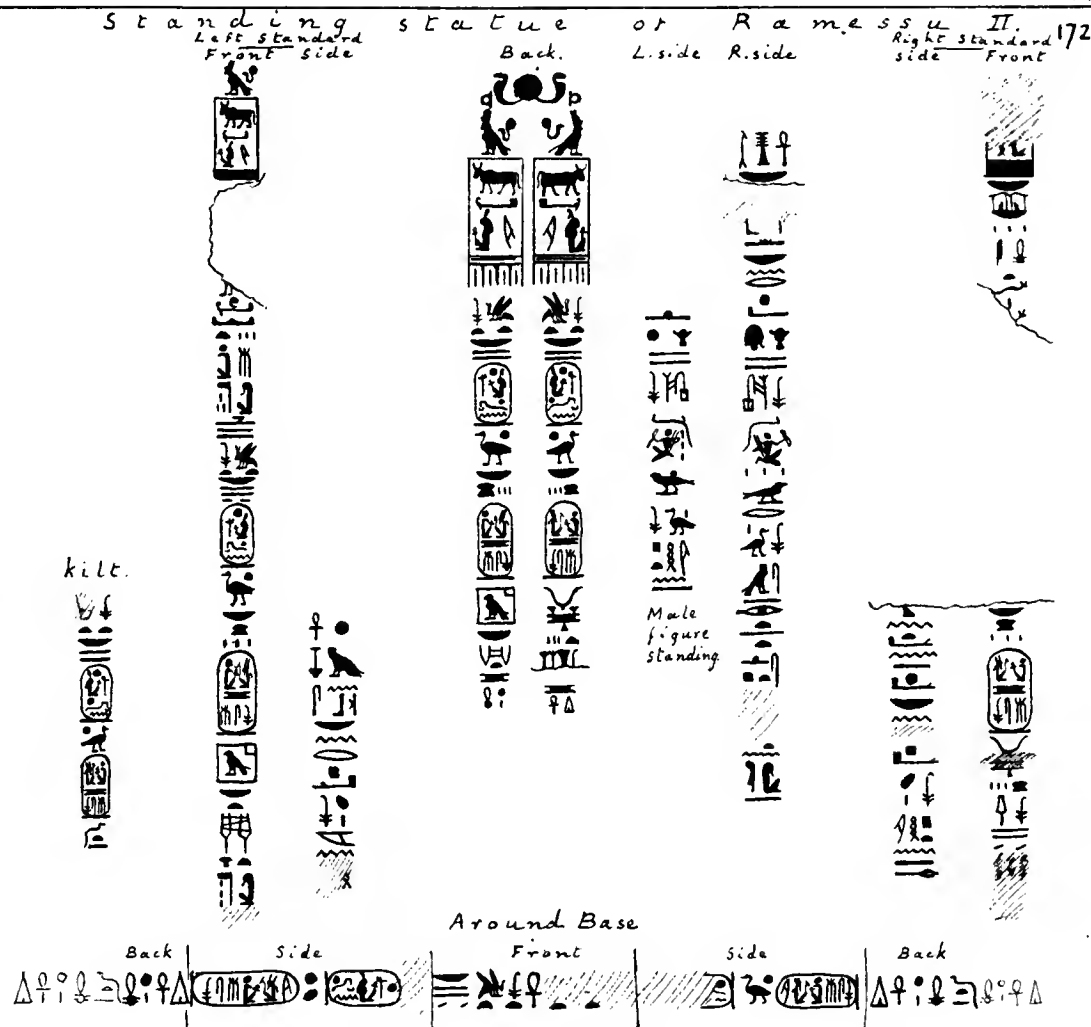
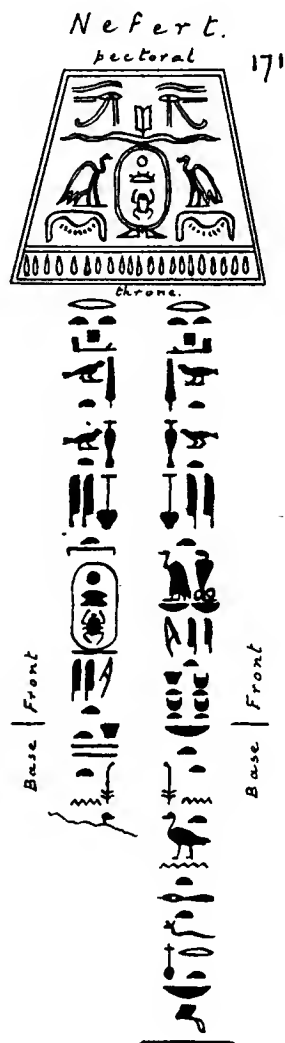
plan 89, 93.



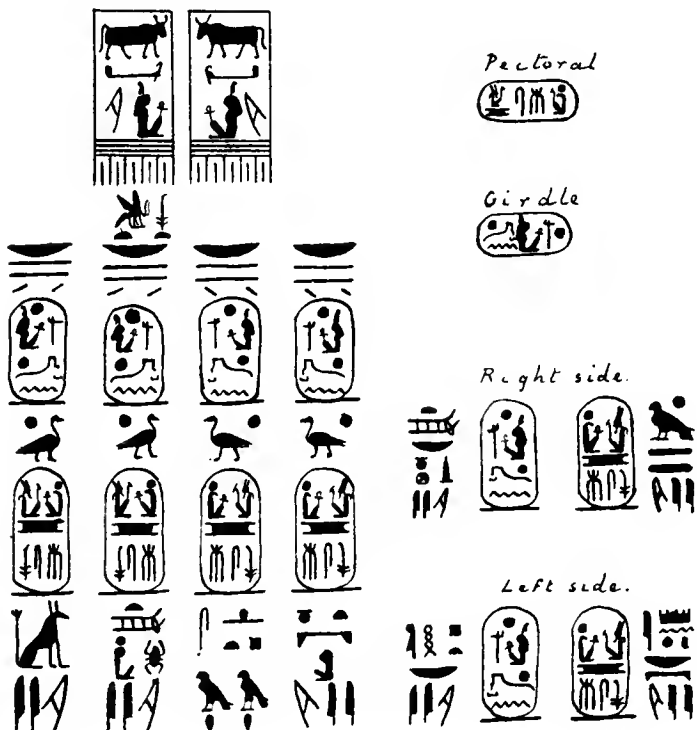
SAN STATUES AT BULAK.

XI

44



Seated statue altered by Ramessu II.
Back.



R. side of throne
L. side the same reversed.

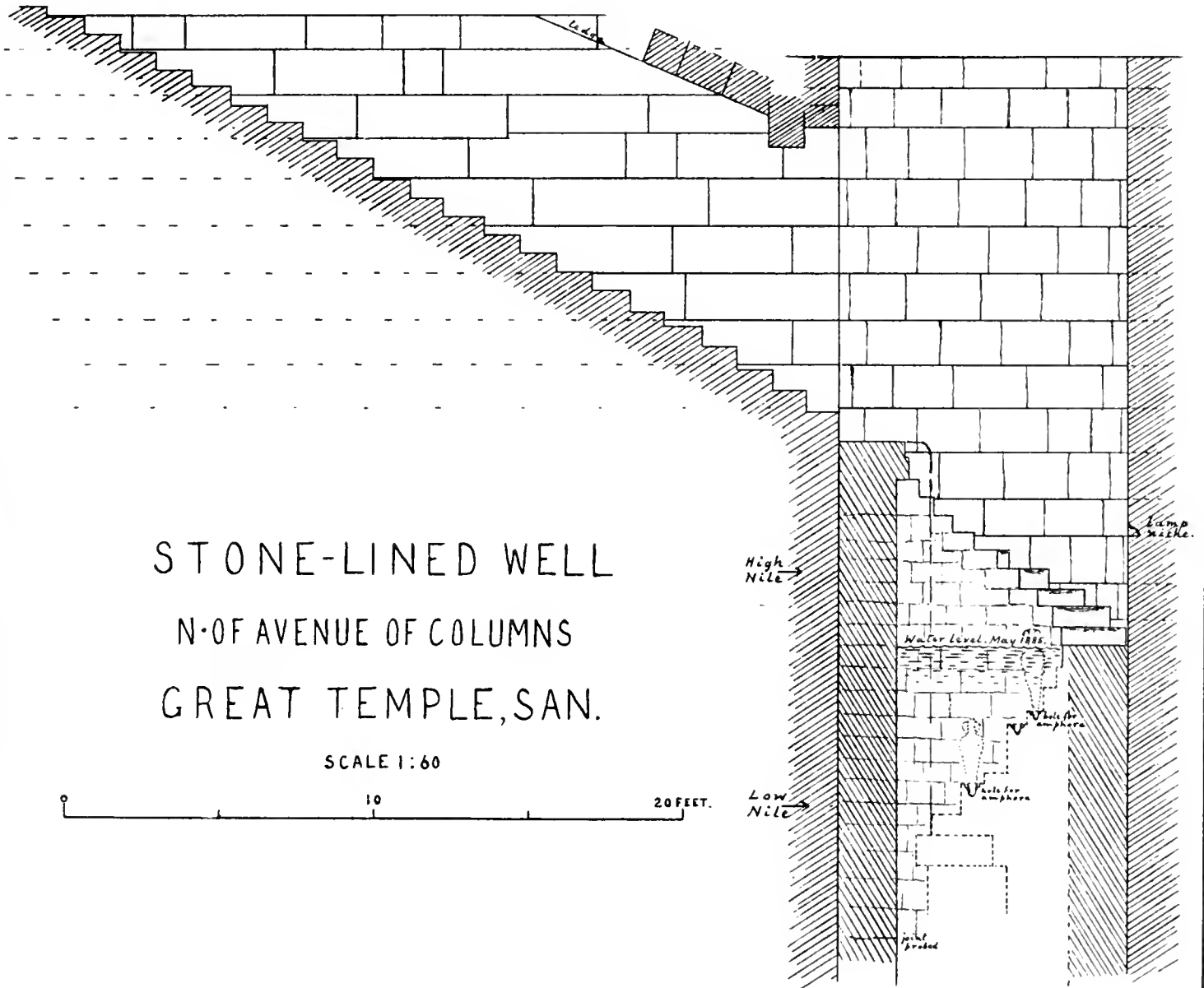


173

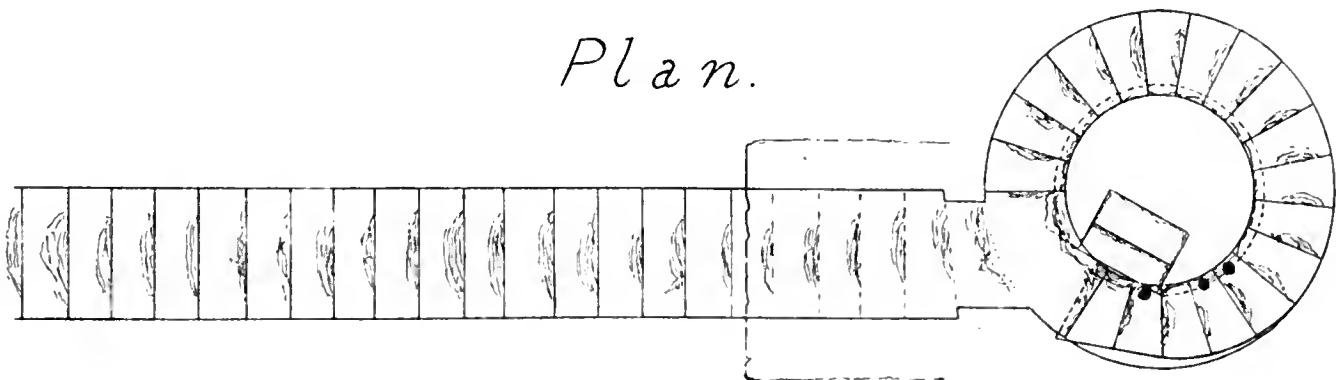


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Section.



Plan.



NEBESHEH (AM)
AND
DEFENNEH (TAHPANHES).

BY
W. M. FLINDERS PETRIE.

WITH CHAPTERS BY
A. S. MURRAY,
KEEPER OF GREEK AND ROMAN ANTIQUITIES, BRITISH MUSEUM,

AND
F. LL. GRIFFITH.

FOURTH MEMOIR OF
THE EGYPT EXPLORATION FUND.

PUBLISHED BY ORDER OF THE COMMITTEE.

LONDON :
MESSRS. TRÜBNER & CO., 57 & 59, LUDGATE HILL, E.C.

—
1888.

“Antiquity! thou wondrous charm, what art thou?”

ELIA.

11

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P R E F A C E.

IN placing before the public another record of explorations in Egypt, it seems a fitting opportunity to define the general principles which I have had in view in conducting and publishing these researches. The need of some such definition is apparent from certain misconceptions which I have observed; and as it may serve to some extent as an end in itself, as well as an explanation with regard to this work, I need not apologize for stating it.

Just as one person has, for economy of time and means, to perform many different functions in carrying on such work; so, in the same way, it is needful for one expedition to be made to serve many different ends, in such wise that the explorer in striving for one end should not disregard the rest. In working on any site the opportunities are many-sided, and our research should neglect none of them if we would use well our advantages. The collector, whose desire it is to see something beautiful in a museum, should remember the larger and more scientific interests; the student of art, who seeks to recover links in his dim pedigrees, must remember how much history can help him; the linguist, whose idea of Egyptology is restricted to hieroglyphics, may recollect that Egypt is not the name of a dead language, but the country of a grand civilization. To look to modern times, our own thoughts and doings will be found quite as well recorded by the homely Metropolitan Board of Works, as in the archives of the War Office.

Our object then should be not only the discovery of an historical text, or a geographical identification, or a new construction in the language, or the development of an art, or the history of pottery, or the details of manufactures, or the mode of living, but all of these together—the whole body of archæology. Archæology is the history of men's thoughts and works; it is to the history of

mind, what mineralogy, and geology, and palæontology, are to matter.* Doubtless language and political history are the grand sciences within the domain of archæology; but they are only sections, and not the whole.

Another point not to be overlooked is that the condition of objects has little to do with their true value. Perfect and pretty things are no doubt very useful to serve as lures for attracting the public to the education prepared for them; but it often happens that for real instruction a broken thing is worth more than one whole, and in no case should we neglect an injured specimen because it has been better originally. A Frenchwoman, it is reported, said on seeing the Parthenon sculptures, that she "did not come there to see a hospital of cripples;" but then she should rather have visited the Crystal Palace or a wax-work show. A museum is in the first place a treasure-house for systematic and scientific research, and in the second place an educational establishment for the public; in no case should it descend to the past indignity of a collection of curiosities or a place of amusement. To reject anything because it is not popularly attractive is a concession to mere showmanism. Let us suppose, in biology for instance, that a set of preparations illustrating each of the main discoveries of recent times were placed on one side of a gallery, and a row of execrably stuffed beasts on the other; does any one doubt which side would be worth most? Or doubt that the populace would flock to the worthless side?

The lines, therefore, on which exploration should be conducted, are the ascertaining of all facts concerning the history and ways of the people whose remains we are examining. But a difficulty at once meets us in the discrimination of what is accidental and what is general, in the immediate valuing of each isolated fact as it appears; in short, in dealing with a larger amount than can be recorded or preserved, and abstracting from it as we go along what is intelligibly connected. A perfect excavator would need a perfect memory, since it is impossible to record or preserve a tenth or even a hundredth part of all that is seen and found. There is no more troublesome question than, What is worth keeping? Sometimes one trifling chip of pottery may be worth

* Nothing shows better the ignoring of true archæology than the journalistic heading "Archæology and Art," two titles which have the same relation as archæology and history, or archæology and poetry.

keeping and recording, when thousands of sherds and pieces of bronze have been rejected. The difference between collecting things because of their value in themselves, or because of the information their site, position, and age impart, is just the difference between a bibliomaniac collecting "tall copies," and the historian who studies the copies regardless of large paper or fine binding.

Now it will be evident that, for all purposes of true archæology, specimens of which the age and locality are unknown have lost more than half their value. Yet it is unfortunately just such specimens, collected by dealers and travellers for the sake of their value in themselves, which form nearly the whole of all collections, public and private. Here lies, then, the great value of systematic and strict excavation, in the obtaining of a scale of comparison by which to arrange and date the various objects we already possess. A specimen may be inferior to others already in a museum, and yet it will be worth more than all of them if it has its history; and it will be the necessary key, to be preserved with the better examples as a voucher of their historical position. When it can be said that a dated collection consists mainly of objects already in a public museum, it shows how invaluable such a series will be for helping to reduce the undated and unlocalized chaos to some order, and for stamping it with an historical value. The aim, then, in excavating should be to obtain and preserve such specimens in particular as may serve as keys to the collections already existing.

Whenever, therefore, I have the opportunity of carrying on such work, I wish to glean every fact which can be intelligibly built into the general fabric of archæology; and specially to attend to such details as have not yet been recorded, and can only be ascertained by means of close attention to every step of the work.

Much of the work described in the present volume has been carried on with the help of Mr. F. Ll. Griffith, who has also contributed some chapters on those matters to which he paid particular attention. As I have only briefly visited Gemayemi, and not seen the Kantara remains at all, he of course writes quite independently. Of the plates Mr. Percy Newberry has again aided me this year by drawing five, and Mr. Griffith has done six plates of inscription;

the remaining plates are of my own drawing: and I wish here to disclaim any intention that these should be looked on from an artistic point of view; they are simply representations of antiquities, and their only value consists in their scientific accuracy. Mr. Spurrell has also generously helped me with a serious task, by weighing nearly a thousand weights; and only those who have done such wearisome work will know how to appreciate such service.

I much regret that circumstances make it likely that I shall carry on my work in Egypt independently of the Fund, with which I have had the pleasure of opening so much new ground.

W. M. FLINDERS PETRIE.

BROMLEY, KENT,

November 26, 1886.

INTRODUCTION.

THE work of this year has lain at places scarcely ever visited by any European, and at which no exploration had previously been attempted. Naukratis was wholly unknown, even as an ancient site, until I first visited it two years ago, and its exploration only dates from last year. Nebeshch, on the opposite side of the Delta, was never seen by any archæologist, until my flying visit when I was at Tanis; and Defenneh, though seen by one or two passing travellers, was untouched and unheeded until I settled there at the end of last March.

Of Naukratis I need say but little, having already described it. I stayed less than a month there, merely to induct Mr. Gardner; but in that time I saw the cemetery successfully opened by him in the mound which had been suspected the year before to be probably the site of it, and he also found the temenos of Hera. The temple of the Dioscuri came out, so far as it remained, as I cleared more in the area of the temenos which I found last year; and, most happily, within ten days I had the clue to the temenos of Aphrodite, and identified the temple. There the pottery of the finest Naukratite ware, with the dedications, came abundantly to light, and a rich field was opened, which was most successfully worked out by Mr. Gardner. Other points of interest also appeared; all of which will be duly recorded in his forthcoming volume. At Tell Nebeshch the ground was wholly different: there was no flourishing native village as at Naukratis, but only a few scattered huts of settled Bedawin, or Arabs as they should be called in their present state, in contradistinction to the fellahin, in whom old Egyptian blood is prominent. These people live here under their aged shekh Nebeshch, almost cut

off from the world; except in the driest months there is but one path through the marshes, and that impossible for any but a native to find, while on most sides are desert or marshy tracts down to Lake Menzaleh. The old shekh was delighted to have his solitude enlivened, and his affection was almost embarrassing. He had seen much in his life; about as old as the century, he had in his younger days been the shekh of the Bedawin, far and wide on the E. of the Nile, about Esneh: he had fought along with Ibrahim Pasha in his campaigns, and was never weary of telling long tales of his doings with Ibrahim and Abbas. Falling into some disgrace with the Government, he was pitchforked out of his high position, and sent down to near Naukratis, in the quagmires about Tell Afrin; then after a while removed again, and given the grant of two or three hundred acres of marshy ground where he still lives. He feels his change and his present state, and longs for some one to listen to the stories of his old wild days; he is truly solitary, with only a few rough attendants, and one son who is but a sorry result for all the six and forty wives which the old shekh is credited with having had in times past. He provided us with a guest-room, and a smaller roofless room adjoining; the walls of both were tunnelled by rats and white ants, who had to be kept in check respectively by heaps of broken shabti and insect powder. With some iron roofing from my house at San, this place was inhabitable, and Mr. Griffith or myself occupied it for full three months.

Of Defenneh no real account could be obtained; before I left England I was told that it was inaccessible until near the summer. At San I was told there was no water there to drink. At

Nebesheh I heard of a farm there. All of this information proved wrong. The best time there would be in the inundation, for then there would be a full supply of fresh water; and the place, and the way there, is dry desert all the year. The water begins to turn brackish in the canal about the time I went there, in March, and fluctuates between better and worse according as more or less is let down from the upper canals. Some of the scrubbiest corn is grown on a few patches S.E. of the site, but it is attended to by its owners from the nearest inhabited place a dozen miles off, and no trace of any habitation is to be seen beside the ruins and a stray tent of the Bedawin. These tents they pitch out in the remotest edges of the lake, hidden by bushes; and it is only when their fires send up a ruddy glow at night that they can be found. All the marsh ground of the north Delta is more or less inhabited by men who have fled from the conscription, and two of my stoutest workers were men of Zagazig, who had thus saved their liberty by settling on the borders of the inhabited land near Defenneh. Long before I went there, my people at Nebesheh were all clamorous to go with me, and the questions about my intentions were more pressing as time went on. When at last I started, we formed a procession of about forty, with two baggage camels of mine; the men with bundles of bread on their backs—for no food can be bought in the desert,—the boys with the hoes, and the girls with the baskets on their heads, with a few *kullehs* and utensils. In spite of the work still being carried on at Nebesheh by Mr. Griffith, the difficulty only was to keep the people back from going. This settlement at Defenneh was a sort of experiment I had often wished for; I went with only my faithful *reis* Muhammed—a lad of about twenty,—and his younger cousin, a fine, sturdy boy named Tulbeh; the rest were all stray workers whom I had never seen till a short time before. We had no soldiers, no police, no shekhs, no guards, nor any of the usual machinery of Egyptian rule; there was no authority to be in-

voked under several hours' journey. The experiment answered better than I could have supposed; though I had up to seventy people there, far from all dwellings, in the desert, I never had the least trouble with any one, and I never heard a squabble between them during the whole two months. They worked as well as I have ever known them work, they obeyed completely, and a thoroughly contented and happy spirit was always seen. Not only so, but the Bedawin around, who used to hunt for stray antiquities and weights, were as quiet and respectful as could be wished; our camp used to be left without any guard, and only a pin in the flap of my tent, while we were half a mile away; yet nothing was ever disturbed, nor had we any complaint to make. I never spent two months more smoothly than while heading our desert camp. Yet the people had not much to content them; they came without any shelter, and nothing but what they wore; they had dry bread to eat, and brackish water to drink; and they worked for sixpence a day, most of them for but five days of the week, as they had to walk twenty-five to forty miles to fetch their food. Some of them, indeed, never left the place, but had a donkey-load of provisions brought over once a week. Their shelter they made up, partly by digging a hole in the sand mounds, partly by booths of thin tamarisk bushes; some were content with a lair hardly more than a dog's hole, while some made an approach to distinct chambers in their construction. With all this, a merry party they were; excepting one or two older men, there was scarcely a lad over twenty or a girl over fifteen in the whole lot. Each night a blazing row of camp-fires flickered their yellow flames up into the starlight, all along the line of booths which skirted the canal banks; mounds of sand tufted over with dark tamarisk bushes (in which they mined their dwellings) backed the line, while the distant ruins of the *kasr* showed dimly on one side, and the gleam of the sluggish canal on the other. Parties would go into the half darkness, and form a circle to hold a *zikk* of

the howling derwishes, for we had one holy man among us who led such devotions; and the grim sawing howl would go up by the hour together. Perhaps some girls would sing on in their wild Arab unison on another side, or a group of boys enjoy a hearty game. Such was our feast of tabernacles, where we had at last got clear of the official curse of the mammon of unrighteousness.

One result, which was very plain, is that it is hopeless to try to begin work in an out-of-the-way place, unless you can carry over with you a party who already know and trust you. At Nebesbeh I had to wait some days before a working gang could be got together; but so soon as they knew the work, they were ready to go anywhere to continue it. This experience at Defenneh has also a decisive bearing on the real hardships of the much abused institution, the *corrée*. It is clear now what natives will gladly do, and what they will go without, for the lowest ordinary wages, and without any compulsion. The real

hardship is taking ten men to do the work of one, and removing them beyond reach of their homes. Otherwise, shelter and food supply they will manage easily without any arrangement, and do a long tramp in the bargain.

I must not conclude this without acknowledging what is a necessary part of my facilities for work, the characters of my overseers. By continual selection and weeding, I have now three or four men whom I respect and trust more, the better I know them. The three brothers—Mahajub, Said, and Muhammed—abu Daud el Gabri have proved unequalled for sturdy independence, unceasing goodwill and kindness, obedience, and readiness for any service, asked or unasked; while Tulbeh, their little cousin, promises to be quite their equal. Though they never stand between me and my workers in any matter, yet it would be impossible to maintain such a good spirit and straightforwardness in the work with men inferior to my good friends.

TELL NEBESHEH.

CHAPTER I.

POSITION AND HISTORY.

1. One of the furthest outposts of cultivation, bordering on the salt desert swamps which surround the marshes of Lake Menzaleh, is the low mound of Tell Nebesheh. Originally known as Tell Farun, with the great monolith shrine called Ras Farun—or “Pharoah’s head”—it acquired the name of Tell Bedawi from the settlement there of a number of Bedawin about a generation back. Neither of these names, however, were convenient to use, as very similar names existed elsewhere, and would cause confusion in future; so the third name of Tell Nebesheh, so called after Shekh Nebesheh, the old chief of the Bedawin, seemed the best to adopt permanently for archaeological purposes. The other names are, however, better known, and are sometimes marked on maps. The position, as may be seen on the War Office map (Tell Badaui), is about 8 miles S.E. of Tanis or San, and about 9 miles N.W. of Salabieh.

At this point one of the many sandy rises of ground that occur in this district swells up from beneath the general plain of Nile mud. All the eastern part of the Delta clearly shows its desert origin; it is a piece of rolling sandy country, just like the entirely desert regions outside of the Delta; but being at a lower level it has been inundated by the Nile, and a sea of mud deposited over nearly the whole of it, leaving only the tops of the sandy hillocks and low ridges exposed in the midst of the black soil. Thus these “gezirehs” or islands, as they are called, crop out at every few miles, and have formed from the earliest days the sites for dwellings, temples, and cemeteries.

Tanis is built upon one of the largest of these islands; the double cemetery of Sueilen is on another; and Tell Gemeyemi, Tell Nebesheh, and many lesser sites rest on the gezirehs around.

The present appearance of Tell Nebesheh is a low dusty rise of ground, with sand hillocks on one side of it, as it is seen in crossing the swamp, three miles of which lie between the edge of the regular cultivation and this furthest outpost. The whole site is about a mile across, with the temple at the west end (see general plan on pl. xvii.) projecting into the cultivated ground; the town adjoins it on the eastern side, and east of the whole is a hillocky, sandy plain covered with tombs. The highest part does not rise more than fifteen or twenty feet above the country. On the south of the plain is the mud-house of the Bedawi shekh, Nebesheh, and on the east and north of the plain are the mud-huts of the Bedawin settled there.

2. But though the present elevation of this mound is so slight, it must have had a far more imposing appearance when it first attracted settlers there in the early days of the twelfth dynasty. The changes which the Delta has undergone within historic times are as great, perhaps, as those of almost any other country. Egypt is so often spoken of as unchanged land, ever the same, owing to the similarity in many respects of its ancient people and ways to those of the present time, that the great physical changes which have taken place, in especially this eastern side of the country, are liable to be overlooked altogether. Some new and important evidences of the past state of the land have come to light in this last year; and, broadly speaking, we may say that when the ancient inhabitants settled and built

here it was not, as we now see, almost all a level plain, but retained much more of its desert features, having high hills of sand still remaining.

Not only has a levelling action been constantly at work in the filling up of the valleys by the mud deposits of the river, until they are all but obliterated, but a converse action has been at work in the denudation of the exposed parts by the wind; thus, from being a piece of native desert such as is seen around Ismailiyeh, or almost anywhere outside of the Nile valley, the country has approximated to a perfectly level plain, filled up and worn down until its original elevations have all but disappeared. The deposits of the Nile we know to have averaged about four inches per century in depth; being this or rather more at Naukratis in the rise since Greek times, at Tanis in the rise of water-level since Greek times, and about this same amount at Heliopolis and Memphis. Hence at the time of even the twelfth dynasty (to say nothing of earlier times), the black plain must have been about fifteen feet lower than it now is, and all the elevations accordingly standing by this amount higher above the general level of the country.

But this is probably only half of the tale. The denudation of the high sandy ground by the wind is something hitherto quite disregarded, but is now seen to be a great factor. At Nebesheh the tombs at first sight appeared as if they were merely the ruins of built tombs which had stood above the ground; perhaps a foot or two, perhaps only an inch or two, remain of their walls, sometimes even two or three walls have wholly disappeared. But these tombs, while they seem to have been like the modern Arab cemeteries of dome tombs, yet bear in most cases the evidence that they were really all subterranean chambers. Not only may they be found in every stage, from being nearly entire beneath the ground, to being almost swept away, but they have usually the well of access remaining (see Nos. 1, 11, 38, and 42, for instance, on pl. xvi.); and no such chimney with foot-holes could have been built by the side of a

sepulchre above ground. Now these tombs were naturally sunk to various depths when they were constructed; some only just beneath the surface, others to a greater depth more resembling the profound tombs that pierce the cliffs of the Memphite hills to their very base. From the almost complete removal of some tombs of the sixth century B.C., and the height of those tombs which have escaped denudation, it may be safely said that at least six feet, and more probably ten feet of the whole surface of the ground has been blown away within little more than two thousand years. Hence the hills of the twelfth dynasty must have stood some fifteen feet higher than their present tops. The plain being also by about as much lower than it now is, there were thirty feet more of apparent elevation, or a total of about fifty feet in place of the twenty feet or thereabouts now to be seen.

Not only does this affect so vastly what we now see, but there can be no doubt that many parts now covered by the black plain stood then some feet above it as sand islets; so that the country then more resembled a piece of desert with its valleys covered by the inundation, than a plain of mud broken by a few low rises of sand.

3. To turn briefly to other places, the extent of this denudation is fully borne out by the state of the camp at Defenneh. There a solid brick wall, fifty feet thick, and doubtless more than half as much in height, has been completely carried away, swept off the surface of the ground, without leaving an inch above the plain, within twenty-five centuries. The bearing of this evidence on the state of the hydrography of the country, especially of the isthmus of Suez, is all-important. If fifteen feet of sand has been scoured away, or even less, it must have completely modified the water depths; for it must be remembered that all this storm of dust must be dropped somewhere, and the water and wet country is an ever-ready trap for it, into which all goes in, but none comes out again. The Bitter Lakes, and other stretches of water

across the isthmus of Suez, are less in area by far than the country around them, which has been scoured by the wind, so that a foot off the country would mean much more than that depth of deposit in the water. It will thus be seen that, so far as this evidence goes, a depth of twenty or even fifty feet of sand may have been laid over these lakes during historic times; thus completely altering the conditions of the water communication, without any need of relying on geologic changes of upheaval. From other considerations it is not likely that the changes have been so extensive as this scale of denudation would produce; but at least we have here to reckon with a factor capable of doing all that we need to account for, and even more.

This fact of the denudation opens our eyes in a melancholy way to the reason why early cemeteries seem to be unattainable in the Delta. If tombs of the nineteenth, and even of the twenty-sixth, dynasty are often so scoured away that barely anything remains of them, it is a simple conclusion that earlier tombs, perhaps of double that age, have vanished into air, entirely denuded away may be a couple of thousand years ago. Only tombs of exceptional depth, or preserved by some accidental protection, would have any chance of coming down to our days. We may see this also shown by the proportions of tombs of different ages at Nebesheh; one of the nineteenth dynasty, two or three of the twentieth, half a dozen or a dozen before the twenty-sixth, and a hundred or more of the twenty-sixth and Persian periods. Yet the place was grander, to judge by the remains of the temples, under the twelfth and nineteenth dynasties, than in later times. What, therefore, with fifteen feet of mud over all the works of man in the plains, and fifteen feet of denudation sweeping away the tombs in the hills, there is a poor chance of recovering the remains of early ages, except in the rocky sites of Upper Egypt.

4. From the statues found in the temple it is clear that this place was of importance in the twelfth dynasty; its history is probably parallel to

that of Tanis, and these two sand-hills of Nebesheh and Tanis were very likely settled at the same time. How far they were related is yet undecided. At first it seemed as if Nebesheh might have been a cemetery of Tanis, and it is not certain that this was not the case to some extent; especially since we see that the temple and cemetery of Nebesheh are larger and more important than would be expected in proportion to the size of the town. Sueilen, about three miles from Tanis, was certainly one cemetery of Tanis; and if a funeral procession once took boat to a place three miles distant, there is no reason against their going eight miles.

The name of the city Am, capital of the nineteenth nome of Lower Egypt, is closely connected with Nebesheh, having been found there on eight different monuments; and since three of these were in the temple (to the exclusion of all other town names), one of them being on a list of the temple festivals in honour of Uati, lady of Am, there is scarcely a possibility of Nebesheh not being this city of Am. This leaves still the question whether there was a separate nome for Tanis, or whether that lay in the nome *Am Pehu*, of which Am was the capital. The latter seems the more likely; and thus Nebesheh would be the legal and religious capital, Am, while Tanis, owing to superior position and importance, overshadowed its legal superior,—much as Chatham exceeds Maidstone, and Liverpool and Manchester eclipse Lancaster. Then in the reconstitution of Greek times, Nebesheh, having dwindled away, the nome was called, from its most important city, Tanis. Such seems, so far as we know, to be the probable case; and the discovery which I made three years ago of two tablets, at Tanis, naming Uati lady of Am, Khem of Am, and Horus of Am, points to there not being a religious centre of equal importance to rival it at Tanis.

This fixing of Am, and the nome of Am Pehu, at Nebesheh is a step of the first class in the geography of the Delta. Am had been supposed to be equivalent to Buto, somewhere in the central

delta (owing to Uati being its goddess), and had otherwise been placed at Pelusium. Now it is safely fixed by the monuments, both in and out of the temple, to the region of Nebesheh, and most probably to the mounds themselves.

5. Founded in the twelfth dynasty, or earlier, the temple of Am underwent, like Tanis, a complete rearrangement by Ramessu II. How far he redecorated the temple, or founded a new building, we cannot learn until we extract the foundation deposits of the great temple; but it is certain that he practically appropriated the place, as he did Tanis, and re-established the worship of Uati, dedicating a beautiful statue of that goddess in highly polished black syenite. He also dedicated a pair of colossi of himself, in the same material, beside covering the walls with his inscriptions, and erecting clustered columns like those of Gurneh. In fact, the temple of Gurneh may very likely enable us to realize that of Nebesheh as to general appearance. Private persons apparently also offered monuments, as a large crouching figure was found here in this temple. Merenptah continued to favour the place, as a unique monument of a free-standing column was placed by him at some distance in front of the pylon, by the side of the roadway.

Setnekht and Ramessu III. placed their names on a sphinx here, but throughout the decadence of the empire the place appears to have been neglected. The tombs of this time are poor, and no monuments of Siamen, or the Bubastites, have been found. The flourishing time of the Renaissance at last brought favour to Am, though strange to say it did nothing for Tanis. It rather seems as if two cities were too much to support in this district in later times. Tanis rose again under the Bubastites, while Am was effaced; then Am was re-established under the Saïtes, while Tanis was neglected; again Tanis flourished under the Ptolemies and Romans, while Am sunk to be a mere village, and the temple was finally ruined.

Though no monuments of the earlier part of the twenty-sixth dynasty have been found in the temple, yet this place arose by the time of Aahmes to be of considerable importance. Apparently some Cypriote mercenaries were stationed here in the military reorganization of Psamtik I., when he established the Greek garrison at the fortress of Tell Defenneh, seventeen miles to the east. Tombs with Cypriote pottery and spears have been found here, and in one case earlier than a tomb which is of the twenty-sixth dynasty, and therefore early in that dynasty. Aahmes undertook the rebuilding of the temple, but apparently considering the old site in the middle of the temenos as too large to refill, and perhaps too much encumbered with rubbish, he adopted a new site at right angles to the old one, and at the north-east corner of it (see pl. xvii.). Here he erected a new temple to Uati, of large blocks of limestone, with a pavement two courses in thickness. Bringing from the old temple the beautiful statue dedicated by Ramessu II., he placed it in a great monolithic shrine of red granite, which weighed nearly sixty tons. The remains of the Ramesside temple were doubtless largely used up for this new temple, as they were for the pylon which Aahmes constructed in the entrance to the temenos. The other statues which adorned the early temple were removed and placed in the later temple, though not all of them.

At the same time the tombs here rose in splendour; in place of small chambers of crude brick, with rudely formed pottery coffins, we find fine limestone chambers, and sarcophagi of the best class sculptured in basalt, and even encased in outer cases of limestone. The place, however, seems to have suffered severely at the Persian invasion; and it is most likely that the great destruction of the statues and shrine happened at that time, since we find that the temple was desecrated in the Ptolemaic times, and small workshops and houses established in the temenos, even just in front of the temple of Aahmes. The

town, however, continued to be inhabited in the Ptolemaic period, though apparently deserted before the Roman conquest. Another town had, however, sprung up at the north end of the cemetery, and this lasted until late Roman times (see small plan on pl. xvii.).

CHAPTER II.

TEMPLES.

6. On first visiting Tell Nebesheh three years ago, I saw there a great mass of granite, which from its rounded top appeared to be the bottom of a sarcophagus turned up on end. This proved, however, on digging to be the back of a shrine, with a semicircular top (see pl. iv.). It was known all over the neighbourhood as the *Ras Farun* (Pharaoh's head) or *Taget Farun*, and might be seen for a mile or two, standing up high above the ground. It was one of the first places I began to work on at Nebesheh, and I soon found that there were remains of a building near it. This building we cleared all over, and traced the limits of its foundations (see pl. xiv.), finding several inscribed monuments lying broken up and scattered about among the blocks of paving which remained.

Shortly after arriving, and before beginning work here, I noticed, while making a plan, a line on the ground, on one side of which the tufts of coarse grass grew scattered about, while on the other side the ground was nearly barren. Suspecting at once that this was a wall, I traced it as well as the surface would allow, and found that it enclosed the ground around the shrine. This showed that I had a large temenos to deal with; and after working a few days at the shrine, I began to try for the pylon of the temenos. This was found very quickly, and the foundations of the pylon were uncovered: here were more monuments, a pair of sphinxes of the twelfth dynasty (one broken to chips), and a pair of colossi of Ramessu II., one much defaced, but the

other nearly perfect. Mr. Griffith found these statues while I was away.

Having thus defined the temenos and pylon, I observed how much to one side the temple site was which I had first found (temple of Aahmes, pl. xiv.); and the site in the middle of the temenos looked very much as if some building had stood there, being a flat space of blown dust, with more or less of chips of stone around it. Several pits dug in it brought up nothing, until one showed at 12 feet below the surface a vertical face of mud with sand against it. This was unmistakably the retaining wall of a foundation, filled up with sand, on which to lay a building; and sinking a row of deep pits, we tracked this at last all round the site of the building, and found all the corners of the area. (First temple of Uati, pl. xiv.). In this way we recovered two temple sites which were quite unknown before.

7. Before entering on the description of these remains, it will be well to notice what has been observed here, and in other examples, to be the Egyptian mode of founding a building in the Delta. First a space, each way about a foot or more larger than the intended building, was marked out, and a wall of crude bricks built around it; in some cases the space was excavated in hard rammed mud: the bottom of the space was quite flat and level. This enclosure thus formed a shallow sunken chamber, which was partly filled with clean desert sand, and on that sand the building was placed, standing clear of the retaining walls of the foundation, with a few inches, or two or three feet of sand filled in between its foundation courses and the wall. The depth of the sand enclosure varies greatly; it may be only a few inches, a mere ceremonial film, as at Naukratis; it is usually 2 or 3 feet; but at the little Ptolemaic site on the south side of the mounds of Tanis, a pit has been excavated through the mass of dirty rubbish-ground to more than 12 feet deep, and filled up with dirty sand and chips for 4 feet, and with 8 feet

of clean sand over that. The foundation deposits are always placed in the sand, about two feet inward from each face of the corner-stone, and a foot or so below the stone. This same order of building a retaining wall around the foundation is followed even when the building stands on a sand plain. The retaining wall is sometimes of stone, possibly in the earlier periods. Such is the regular system of foundation, which has been traced during my work in Egypt by the comparison of half a dozen different buildings.

8. Turning now to pl. xiv. we will notice the details there represented. The great temenos wall is far from regular in its plan; but this may be to a great extent accounted for. On the general plan (pl. xvii.) it will be seen how closely the cultivated ground approaches it on the S.W.; the ground falling away there into a small canal. The dip must have been still greater before the plain rose by deposits, and may well have caused the builders to contract the enclosed space at that corner. The north side, it will be seen, is also askew to the axis. But while planning the temenos, and in fact while excavating to find the edges of the wall, I was puzzled by two strange changes in its thickness, at the northern ends of the east and west sides. I carefully fixed the position of these variations, and when I came to plot them found that, quite unexpectedly, they were opposite one to another; so that a line drawn parallel to the axis of the temple, as on the plan, exactly connected the two points. It seems, therefore, very probable that originally the temenos wall on the west side was parallel to the temple; but after being ruined, say in the post-Ramesside times, it was rebuilt rather further out, and retaining a portion of each of the old corners. A still later addition to it was noticed at the north-east corner, where it has plainly been thickened on the north side. Some further details might appear if it were it completely uncovered; but I could not spare time or men for more than a row of small pits and trenches around it, just to show the

position of the inner and outer faces in three or four spots on each side. The wall is 30 feet thick at the thinnest point, increasing to 45 feet elsewhere, and 63 feet at the exceptional part on the N.W. It was not so gigantic, therefore, as the great walls of Tanis (80 feet), Sais, or Buto, but still was a vast piece of work, being just half a mile in circuit; if 30 feet high, which is the least we can expect (Buto is over 30 feet, and Tanis 27 feet, after all their denudation), then it would contain 100,000 cubic yards of brickwork.

9. At 170 feet in front of the propylon of the temenos stood a monument of Merenptah, which is—so far as we know—unique. It is a column of red granite, now broken in three parts; its surface is divided by the large curves of a sub-clustered form, the projection of each rib of the surface not being sufficient to interrupt the sculpturing of groups on its sides. Around it were scenes of adoration and offering by the king before different gods. Unhappily it is too much decomposed on the surface to show much of the sculptures. The top was quite flat, without any sort of capital or even moulding around it; but on the flat surface stood a group, of the king kneeling, overshadowed by a hawk which stands behind him. The total height was 12 feet, and the diameter is 31 inches. No other example of a statue on the top of a column has been found in Egypt, until Roman times, I believe; nor any case of free-standing columns placed far out in front of a building, to flank the avenue of approach. Statues of Ramessu II. were placed as far out as 230 feet in front of the pylon of Tanis, but no columns. This column was doubtless one of a pair, as it would never have stood alone on one side of the road; but though many trenches were dug around this region, no trace of the second column could be found. Architecturally, such a column seems Asiatic rather than Egyptian, remembering the two great free-standing columns, with special names, placed in front of Solomon's temple; and again the great column remaining at

Persepolis, some way in front of the bulls which lead up to the great square building there.

Passing this column, and a square base of limestone lying on the other side of the roadway, we come to the propylon site, in front of the gateway. Though none of the stonework, except part of the substructure of the pavement, remains, we can hardly doubt from the form of the shallow chamber filled with sand, that a propylon stood here. The central hollow (shaded with dots) is the deepest, having 34 inches of sand in it beneath the pavement slabs; while the side hollows had only 6 or 8 inches of sand. No foundation deposits were found in these spaces, which were discovered and cleared by Mr. Griffith after I left Nebesheh. The width of this propylon must have been about 70 feet, judging by the foundation space. In front of it two drains were found; they were cut in limestone, with two equal upper and lower pieces fitted together. The outside is cylindrical, 2 feet or rather more in diameter; and the inside is hexagonal, each face about 6 inches wide, three sides of the hollow being cut in the upper, and three sides in the lower stone. Another, similar, drain was found at the S.E. of the great temple site.

10. Beyond this sand foundation of the propylon is a deep and massive pavement of four courses in thickness; the top course, which runs on over the sand hollow, is 13 inches thick, and those below it 27, 21, and 20 inches respectively. The last of these reaches to 9 inches below the water-level of the beginning of April. Thus the whole four courses of this pavement are 81 inches thick, and reach up to 72 inches over the present low-water level.

Just beyond the propylon, guarding the entrance to the pylon, were two seated colossi of Ramessu II. One of these remains lying on the pavement in a fair state of preservation, the face is rather bruised, and part of the beard and uræus knocked off, but otherwise it is perfect. It is carved in black syenite, and is 82 inches high over all, and therefore considerably over life size. It is

an original work of Ramessu II., and has not been appropriated by any other king. On further search, the fellow-statue was found, a good deal injured, to the north of this.

The whole of the substructure of this pylon has been built from the ruins of the temple of Ramessu II., evidently by Aahmes, when he re-established the place with the new temple. On many of the blocks are portions of hieroglyphic inscriptions of a large scale, and one of them bore a fine portrait of Ramessu II., happily quite uninjured as to the face, though the back of the head is lost. This we were allowed to remove, by M. Maspero's permission, and it will, I hope, be added to the Fine Art Museum at Boston. The central pavement has been less injured than other parts of the substructure of the pylon; for the reason that, not having to bear any weight, the stones were smaller and inferior, and hence less worth removal. The sides of the pylon are, on the contrary, nearly all cleared away, leaving only a few large blocks of the lowest course. The edge of the pavement substructure which remains, shows that the passage was about $10\frac{1}{2}$ feet wide, and the mass of the pylon on each side about 14 feet wide, and 30 or 40 feet through from back to front.

At the inner side of the pylon stood two sphinxes of black syenite. One of these remains complete, with the exception of the head, and a flake off the left flank; it is 67 inches long. The other, on the north side, was broken up into chips, and thrown down into a deep hollow left by the extraction of the foundations. These sphinxes have a most remarkable history of appropriation, which seems to show that they were valued. First carved, and well carved, under the twelfth dynasty apparently, they bore the founder's name on the usual space between the paws and on the chest. Secondly, they were appropriated by a high official, probably of the thirteenth to seventeenth dynasties, the same apparently who appropriated an altar which we shall notice farther on. He cut a long inscription all round the base, which has unfortunately been

nearly all erased in later times. Thirdly, there is an erased space on the right shoulder, which doubtless contained cartouches. Fourthly, there is an erased space on the right flank, which also contained cartouches. Fifthly, there is an erased space similarly on the left shoulder. Sixthly, there are cartouches of Seti II. on the chest. Seventhly, there are cartouches of Set-nekht on the left shoulder. Eighthly, there are cartouches of Ramessu III. cut across the ribbed lines of the wig on either side of the chest. Aahmes forebore any further claims on this defaced animal. Indeed, it seems very probable that the head had been knocked off before his time. The broken surface is very much smoothed by repeated rubbing, in spite of the hardness of the stone; if it had been only broken when the place was in course of demolition finally, there would not be likely to have been enough passing to have gradually worn away the surface. It seems rather as if it had been injured before Aahmes placed it here, and had been worn by loungers and passers, while the new temple was frequented.

Within the pylon, in the area of the temenos, are various pieces of substructure remaining; pavement was found between the pylon and the temple, and just at the S.W. of the pylon is a piece of banded lotus column placed at the base of some masonry. This is valuable as showing the style of the destroyed temple of Ramessu II. The ribs of it are semicylindrical, without any ridge or break in the curvature, like the clustered columns of the temple of Gurneh; and from the appearance of the foundation of the first temple, it seems most likely that such columns formed a colonnade in front of the temple, like the colonnade of Gurneh. This drum was measured as about 6 feet diameter; or the colonnets as 22 inches each across, which would give a circuit of 175 inches for the whole, there being eight colonnets around it.

11. Of the first temple scarcely anything remains *in situ*, so far as our excavations have

gone. The retaining wall of the foundation was traced by pits around the circuit of it, and a piece of substructure remains at the S.E. corner, on which a statue of an official was found lying. Along the front is a broad bed of sand in a hollow, for a foundation; beyond this is a mass of brickwork (shaded in the plan); and then, beyond that, was another sand hollow for another foundation. All around the rest of the building there is only the retaining wall, with clean sand against the face of it; this sand was about 30 inches wide, and immediately within it, where the stones had been extracted, the ground is formed of dirty earth and stone chips. The sand has been partly dug out in removing the stones, and is heaped up outside, over the top of the retaining wall; while all around the area is a bank of earth and chips, which reaches up to the present surface of the ground. These particulars were observed by sinking pits cutting through the wall, sand, and earth, so as to show a clean section. The depth is 10 or 12 feet below the present surface of blown earth accumulated in the temenos.

When I left the work in Mr. Griffith's hands, after finding most of the circuit of the foundation by pits, I urgently desired him to finish clearing the form of the foundation, and to extract, if possible, the foundation deposits. This, unhappily, he was unable to do with the most strenuous efforts, owing to the depth below the water. At the N.E. corner he went to 25 inches below water, at the S.E. to 35 inches, at the S.W. to 25 inches, and at the N.W. to 40 inches below the low-water level of April; yet in no case was any deposit reached, or the bottom of the retaining wall discovered. In the S.W. corner a fine limestone wall was found below the brick wall, flush with the face of it, and forming the lower part of the retaining wall. This limestone wall was of three courses, each 20 inches thick, and 12 inches deep back; the courses beginning at 6 inches above water-level, and being found by probing to a depth of 54

inches below the water. The sumptuous work of placing a fine limestone lining to a mere underground retaining wall suggests that a fine deposit probably awaits the explorer here; but the permeability of the great sand bed of the foundation enables the water to flow in so readily, that it is impossible to reach it without some extraordinary means, such as freezing the soil, a diving caisson, or pumping the whole area around dry with large pumps. As has been observed in Chapter I., the water-level of the country has risen 10 or 11 feet since this temple was founded, perhaps even 15 feet, if it is the original foundation of the twelfth dynasty. Hence the deposits may easily be 6 or 8 feet below the present water-level.

At the S.E. corner there remains one course of substructure, of which the joints are shown on the plan; its base is 12 inches over the water-level, and it is 16 inches thick. There are traces of the blocks above having been set back 8 inches along the front; just as the blocks of the Aahmes temple foundation recede. On the block with a spot on it was a mason's mark. Now it is evident that this wall did not run round the front of the building, as it has a smooth facing in line on the north side; and from the mass of brickwork (shaded) ending so flatly on the west, and the disturbed soil going down to below water-level there, it seems that a more massive and important wall existed on the west of this brick mass. It seems likely, then, that this brick represents the space within a colonnade in front of the temple; that the real front of the temple stood on the west of it; and a colonnade, flanked by antæ, stood in front of the temple. From the drum found by the pylon, and the intercolumniation of the colonnade of similar columns at Gurneh, we may conclude that there were two columns on either side of the entrance. In classical phrase it would thus be tetrastyle *in antis*. A dotted line is placed around the area of the building, showing the probable size of the interior, up to the inner face of the stone walls.

The size of the temple, therefore, was about 208×92 feet outside, and 155×70 feet inside: that is to say, about the size of the temple of Amenhotep III., or either of the temples of Ramessu III. at Karnak.

The only statue found here was lying on the northern part of the substructure, at the south-east corner. It is a figure represented as seated on the ground, with the arms resting on the knees in the usual position. It represents an official, Merenptah, son of Pa-mer-kau, whose ushabti were found in a tomb in the cemetery (No. 35). Between the hands is the cartouche of Ramessu II., showing the age, and on the front were two divinities standing; one is Uati, lady of Am, and the other is defaced. The inscriptions mention also the mother of Merenptah, Ta-usert, and two other sons of Pa-mer-kau; evidently this family were the great people of the district in those days. The whole statue weighs about a ton. Probably other sculptures lie beneath the sand in the area of this temple, but as it would take several weeks' work and cost a hundred pounds to clear it out, and there did not seem much prospect of obtaining fresh information, it still remains to be examined. There is some chance of finding Hyksos remains here, or inscriptions of officials of their period, which would perhaps make further work desirable.

12. We now turn to the second and smaller temple built by Aahmes II. The only remains of this *in situ*, above the foundation enclosure, are portions of a thick double pavement near the front, and the back of the great granite shrine still standing erect upon a block of quartzite sandstone, which rests on some other blocks of the pavement. The front is peculiar in form, having a projection, unlike the usual flat front of Egyptian temples. As a porch or portico seems to be unknown elsewhere in temples, it seems probable that this was a small platform in front of the entrance, perhaps approached by one or two steps, for the basis of the statues of quartzite sandstone which stood on

either side of the door. The thrones of these two statues were found lying in the hollow left by the abstraction of the double pavement. They were seated figures of Useratesen III., with standing figures of his daughters at either side of his knees. The sides of the throne were sculptured with the group of the two Niles holding the lotus plants twisted around the *sam*. One of these thrones is in good state, the group on the side being in perfect condition. The total height of the statues was about 6 feet. No trace of the upper parts was found.

The temple itself would seem to have been about 76×47 ft. outside, and therefore probably not more than 66×37 ft. inside. The roof would, therefore, be doubtless supported by two rows of pillars, dividing the breadth in three parts. Perhaps some indication of the internal divisions of it may be seen by the foundation deposit, found near the middle of the area. If this was only a sole central deposit, it would probably have been put in the middle, and not 80 in. to one side. It seems most likely that this was placed beneath one jamb of the door of the cella. If about 30 in. inward from the face of the stone, like the other deposits, it would imply that the doorway was about 100 in. wide; and it seems not improbable that the door might have been of the same width as the shrine, which is just 100 in.

In the area of the temple were several blocks of red granite remaining, sculptured with scenes of offering, and cartouches which have unfortunately been entirely erased. Beside these the lower part of a beautiful statue of Uati, in highly polished black syenite, was found, bearing a dedication by Ramessu II. on the back. From the size of this fragment, broken off just above the hand holding the papyrus sceptre, and at the ankles, it seems probable that it was about 75 in. high when perfect. This, with the crown, would apparently just fit the great granite shrine, which was about 90 in. high inside above the bench in which the base of the statue would be placed (pl.

iv.). It seems very probable, therefore, that this was the statue of the temple, originally placed in the great temple by Ramessu II., and then removed and enshrined afresh by Aahmes on founding the new temple.

Beside this a group of three persons seated was found, holding a table of offerings in front of them, on the front of which a long inscription records the festivals in honour of Uati, the lady of Am, and other divinities of the place (see sect. 30).

13. Finally, at the north end stood the great granite monolith shrine, which first drew me to examine the place (see pl. iv.). This is over all 15 ft. 4 in. high, 8 ft. 7 in. wide at the base, and 10 ft. 4 in. from back to front; the total weight being about 58 tons. This does not quite rival the great shrine of Thmuis, as that is 18 ft. high, and wrought to a fine pyramidal top, instead of being rather roughly rounded; but still it is a fine piece of work, the sides being flat and well polished, and the edges neatly bevelled off to avoid their being accidentally chipped. At the back, however, the stuff ran rather short, and both the back edges are sloped away irregularly. The front was decorated along the top by a frieze of crowned uræi surmounting the globe and wings, so familiar in late work. Up the sides of the doorway were two columns of inscriptions, unhappily defaced. All that can be traced is marked on the drawing in pl. iv. The banner begins with S-men, and this limits it to Aahmes II., Nekht-har-heb, or Nekht-neb-f. As there is no trace of the two latter kings here, and Aahmes is known from the foundation deposits to have built this temple, there seems no doubt but that he had this shrine made on re-establishing the worship of Uati at Am. The dotted outline will show how the statue, of which the lower part was found, would fit in the shrine.

The plan and elevation here given are, of course, a restoration, as will be seen from the sketch of the present state of the shrine on the

same plate. The materials for this restoration were the fragments found lying around the shrine when excavated. In all, twenty blocks were carefully examined and measured. The depth from back to front was determined by the present back, the piece of sculptured front shown in the elevation, and a block which went between them and could be identified by the fractures. The only uncertain points in this restoration are the height of the doorway, and the verticality of the doorway and inscription, or its parallelism with the slightly sloping side, and also the thickness of the reveals or jambs of the doorway. That these did not extend up to the bench in the inside is certain, as there is a piece of the side near the bottom which is only 20 in. thick. The positions of the hieroglyphs on the sides were all measured on the fallen jamb, which lies a little way in front of the shrine. The bench inside has a recess in it, evidently intended to hold the base of the statue. What the arrangement of the statue and its base block was, we can best realize from the alabaster statue of Queen Ameniritis, still fixed on its base block of grey granite, in the Bulak Museum.

14. Beside the large monuments, two pieces of statuettes were found in the chips of the temple. The first piece found within this temple, on the second day of digging, was a fragment of the legs of a statuette in limestone, much injured, but yet bearing the precious mention of the city of Am close to its upper fracture (see pl. x. 12). Two and a half weeks later, a torso of a very fine green basalt statuette was found, with a delicately cut inscription on its back, apparently of the style of the thirtieth dynasty; this again bore the name of Am, but close to its lower fracture (see pl. x. 11). Beside these the group with a table of offerings, and the statue of Merenptah, both mention the city of Am, making four notices of it in this temple.

We will lastly notice the small objects, the foundation deposits. In pl. vi. will be seen the

positions of these finds in relation to the corners of the brick retaining wall of the foundation. The bricks of this wall are $17.9 \times 8.9 \times 5.2$ inches. The S.W. was the first deposit for which I tried. Here we came down on the pottery, and after removing that carefully I found I was below water-level. Scraping out the sand, I groped down below the water, scarcely expecting to find anything; but after going nearly a foot below the water I brought up a porcelain plaque, which on hastily rubbing the sand off it showed the name of Aahmes. Many more plaques were found by further groping, and this proved to be the richest corner of all, having a double supply of plaques, and some pottery stands not found elsewhere. After this, I next excavated the other corners with more space, and arranged to have baling kept going actively all the time I was at work below water-level. In this way I was able to lay bare all the deposits regularly, and draw and measure their exact positions, as shown on pl. vi. At the N.E. no deposit could be found, although we searched far lower and wider than for the others; and as a double set of plaques was found at the S.W., I can only suppose that the N.E. corner was accidentally not prepared properly, and that the surplus was put in the S.W. After the corners, a set of pottery was found near the middle of the area, probably below one jamb of the door of the cella, as already noticed. No plaques were placed with this, though I cleared it to a far greater depth than the other deposits. The pottery was two feet over water-level, and I searched to below the water.

On looking at the types of the deposits (pl. v.), the stone plaques are ground but not highly polished, and the gold and silver are marked by punching with delicate punches, curved and straight. No. 9 is of green limestone apparently, rather hard. The green glazed plaques are varied; the two cartouches appear one on each side, but the title is either *nuter nofer* or *suten sekhet*. The lead plaque is distinctly not inscribed; and the copper is too much corroded to show whether it

was inscribed or not. The types of the pottery vessels plainly show them to be ceremonial imitations of various vessels of larger size and sometimes of different material. They may, therefore, be the cheap substitutes for more valuable vessels which were deposited in earlier times under temples, either as the vessels consecrated by having been used in the ceremony of the foundation, and therefore not to be used again for other purposes, or else as models of what were to be used in the temple. The view of consecrated articles buried to prevent their re-use seems the more likely; and it would explain the models of tools found at Naukratis and Gemeyemi as not the models of what *would be* used in the building, but as representing the tools which would otherwise have been forfeit to the gods as having been *already* used in the foundation ceremony;—much as if the silver trowel used at a modern masonic ceremony should be left in the mortar beneath the stone, or a cheaper substitute for it. The vessels Nos. 12 and 13 are evidently copied from the bronze *situla* with a swinging handle; Nos. 18 and 19, again, look as if modelled from metal prototypes; Nos. 24, 25, and 33 may well be imitations of stone vessels; and Nos. 11, 15, 29 and 35 are clear copies of the larger pottery vessels of the twenty-sixth dynasty, such as I found at Defenneh (see pl. xxxiii. 4, xxxiv. 19, 21).

The full catalogue of all that was found in these deposits is as follows, referring to the numbers on pl. v. :—

| | | S.E. | S.W. | N.W. |
|-------|------------------------|------|------|------|
| 1, 10 | Green glaze | 1 | 5 | 1 |
| 5 | Gold | 1 | 2 | 1 |
| 6 | Silver | 1 | 2 | 2 |
| 7 | Lead | 1 | 1 | 1 |
| 4 | Copper | 1 | 1 | 1 |
| 2 | Lapis lazuli | 1 | 1 | 1 |
| 3 | Cornelian | 4 | 4 | 3 |
| 8 | Limestone, brown . . | 1 | ... | 1 |
| 8a | „ mottled | 1 | 1 | 1 |
| 9 | „ p green | 3 | 4 | 2 |
| 9a | Felspar, green | ... | ... | 2 |
| | Bitumen | ... | ... | 1 |
| | 12 varieties | 15 | 21 | 17 |

POTTERY.

| | S.E. | S.W. | N.W. | W. Central. | | Total. |
|--------------|------|------|------|-------------|-------|--------|
| 11 | 3 | 2 | 1 | 15 | + (1) | 22 |
| 12 | 2 | 1 | ... | 2 | | 5 |
| 13 | 1 | ... | ... | ... | | 1 |
| 14 | 2 | 1 | ... | 1 | | 4 |
| 15 | ... | 1 | ... | ... | | 1 |
| 16 } 32 } | 5 | 7 | 6 | 1 | | 19 |
| 17 | ... | ... | ... | 3 | | 3 |
| 18 | ... | 1 | ... | ... | | 1 |
| 19 | ... | 1 | ... | ... | | 1 |
| 20 | ... | ... | 1 | ... | | 1 |
| 21 | ... | 1 | ... | ... | | 1 |
| 22 | ... | ... | ... | 1 | | 1 |
| 23 | 1 | ... | ... | ... | | 1 |
| 24 | 1 | 2 | 2 | 1 | | 6 |
| 25 | ... | ... | 1 | ... | | 1 |
| 26 | 1 | 1 | 2 | 1 | | 5 |
| 27 | ... | 1 | ... | ... | | 1 |
| 28 | ... | ... | 1 | ... | | 1 |
| 29 | ... | ... | ... | 2 | | 2 |
| 30 } 31 } | 6 | 2 | 6 | 4 | (1) | 19 |
| 32 (see 16) | | | | | | |
| 33 | ... | 2 | 2 | ... | | 4 |
| 34 | 1 | 1 | ... | ... | | 2 |
| 35 | ... | ... | 3 | ... | | 3 |
| Totals | 23 | 24 | 25 | 31 | (2) | 95 |

The two numbers in parentheses had lost their marks when I catalogued them in London; 16 and 32 are the extremes of a very common, but variable family of saucers; 30 and 31 are two forms of one other type; the numbers in each deposit seem to have been intended to be roughly equal. Very probably there may be another deposit, on the east side, matching that found on the west of the middle; but as the west central had no plaques, and a sufficient amount of pottery had been secured, I thought better to leave that alone for antiquaries of future ages.

15. The one other monument in the temenos which now remains to be noticed is the altar found outside the small temple, behind the shrine. This altar may have been originally in the temple, and have been rolled out; but as it was found outside, and lying just behind the shrine, and yet duly oriented, it seems more likely to have been placed by Aahmes at the back of the small temple. It was originally a work of Amenemhat II., carved with the usual low relief,

fine lines, and high polish of the twelfth dynasty. The upper surface has unfortunately suffered severely from the salt, which has scaled off much of it, and has also so swollen the syenite that the corners are flaked away likewise. This action of salt on syenite was still more shown by some sculptured fragments found close to the surface just N. of the altar. These were entirely frayed into their component crystals by the crystallizing force of the salt in the interstitial joints of the stone, so that the mass was held together—so far as it would hold—by the salt alone. Any porous material lying near the surface, where the salt crystallizes out of the soil, above the permanently damp earth, is always thus attacked, pottery being flaked to pieces, or large chips blistered out of it. Even mud bricks are frequently reduced to powder, and show as much salt as mud on cutting them through.

The inscriptions added to this altar in later times than the twelfth dynasty are, however, the most important part of it (see pl. ix. 1). They were engraved by a certain "chief of the chancellors and royal seal bearer," whose name and further titles are effaced. This person was one of a series of officials whose titles were singularly parallel to the English Lord High Chancellor and Lord Privy Seal. Such titles imply a unique position, or one which would only be held in duplicate by a viceroy in a different province, such as the Princes of Cush under the eighteenth dynasty. The further evidences of the power of the successive holders of this double office is seen from their having a series of scarabs, like those of the kings and members of the royal families of the twelfth and fourteenth dynasties, with their names and titles; many such are known, as for instance, Ha-sa-r, Ptah-ran, Ka-em . . . hes, Se-neb, Senb-su-ma, Senb-a, Hor-em . . . , and Herfu.

Beside this no other instance is known, so far as I remember, of a personage not actually reigning who has usurped royal monuments in a public temple, and even in a capital of a nome, as this chief chancellor has appropriated the two

sphinxes before mentioned, and this monument, by long inscriptions. This altar gives, therefore, much fresh light on this obscure class of officials; it shows that they existed after the twelfth dynasty, though of course before the eighteenth, and that they usurped prerogatives otherwise reserved to reigning kings. So far we are on certain facts.

16. To turn now briefly to an hypothesis suggested by these facts. We find in the Hyksos invasion the rule of a hated and conquering race; yet a rule which did not at all crush out the civilization which it already found in Egypt. Further, after a time, it gradually imbibed the civilization over which it dominated. And yet it was a rule without much civil organization, if any, since it was only as Manetho says, "at length they made one of themselves king" after conquering and pillaging the country (Jos. Cont. Ap. i. 14). *Πέρας δέ* implies "finally," "at the end" of all the invasion, struggle, and capture of the inhabitants. The nearest historical parallel, by the light of which we must judge this case, is the Arab invasion of Egypt, and subjugation of the Copts: here the conquered were under the debasement of Byzantine rule, as the Egyptians of the thirteenth and fourteenth dynasty were living under the decayed forms of the civilization of the twelfth; but the conquerors were more civilized probably than the Hyksos, and more capable of organizing themselves; yet we see that they adopted the arts and the government which they found in the country to a great extent, and—like the Hyksos—became Egyptianized. But one thing they took much as they found it,—the bureaucracy who managed all the details of the needful administration of the country. The officials continued to be Copts, and there was probably little break in the inherited offices of the internal organization. Now this is exactly an explanation of what we can see under the Hyksos. They conquered the country as a military horde, without even a king; they levied tribute (1st Sall. Pap. line 2); but they probably

had the sense to let the natives collect it for them, and left the native organization to follow its own ways. A very curious evidence of this being in after times believed to have been the case, even when the Hyksos were as much Egyptianized as possible, is given us in the celebrated fragment of the first Sallier Papyrus, which at least shows us what was the tradition of their rule. In that we find, that even for a royal letter the Hyksos Apapi is said not to dictate his own words, but to be completely in the hands of his scribes, for "King Apapi sent to the Ruler of the South a notice, according as his scribes knowing in affairs said." This view explains the continuity so evident between the middle kingdom and the rise of the empire; it exactly agrees with the one or two fragments of information that remain to us, and it accords with the historic parallel of the later invasion from Asia.

Now to apply the facts we have noticed above:—There is a series of viziers, men who acted for the king over the treasury and taxes, and over the royal decrees and public documents, bearing the king's seal. These men lived after the twelfth, and before the eighteenth dynasty. And, further, they would seem to have acted for rulers who did not care about the public monuments, and would allow them to usurp them at their pleasure. Here we have the exact description of a native vizier of a Hyksos king. We have but fragments and suggestions to lead us, but every item that we can glean exactly falls into a consistent place on this hypothesis, and would be hard to adjust to any other. Leiblein has already pointed out how the fourteenth dynasty, with its short reigns averaging only two years and a half, represents viceroys of the Hyksos; but may these not be identical with the men who in the Hyksos country were reckoned as viziers, while by their own countrymen in the upper country they were counted as kings? They may have even had a different title, and acted as viziers in one part of the country, and as semi-independent kings in another part. Or the viziers may have been the

lower title which the chief of the native administration had to adopt when the Hyksos made themselves a king. This is a point on which we must wait for more light.

But yet one further document may be quoted, as giving and receiving light on this question: the account of Joseph in the book of Genesis undoubtedly refers to the Hyksos period, and there we read, "Let Pharaoh look out a man discreet and wise, and set him over the land of Egypt,"—not, let Pharaoh give orders to his own officers. "And Pharaoh said unto Joseph . . . Thou shalt be over my house, and according unto thy word shall all my people be ruled; only in the throne will I be greater than thou. And Pharaoh said unto Joseph, See, I have set thee over all the land of Egypt. And Pharaoh took off his signet-ring from his hand, and put it upon Joseph's hand, and arrayed him in vestures of fine linen, and put a gold chain about his neck; and he made him to ride in the second chariot which he had; and they cried before him, Abrech; and he set him over all the land of Egypt." Here we read of the investiture of a vizier under the Hyksos, creating him royal seal-bearer, and giving him the honour of the second chariot. This we now see was not an extraordinary act of an autocrat, but the filling up of a regular office of the head of the native administration.

CHAPTER III.

THE CEMETERY.

17. The cemetery of Tell Nebesheh covers a large space of ground (see pl. xv.), but does not seem to have been arranged on any regular plan, or to have conformed to any lines of road across it. The tombs are placed, as will be seen, at almost all angles, though roughly to the cardinal points in general. The earlier tombs, however, seem to be inclined more to the east of north than the later; Nos. 4, 3, 5, 7, 8, 27, 31 of the Ramesside period are all considerably to the east, only No. 21 is less so. The Cypriote tombs are rather less inclined on the whole, Nos. 1, 17,

18, 26, 29, 33. The later tombs of the twenty-sixth dynasty, such as Nos. 28, 12, 42, 38, 39, are nearly due north and south; while No. 23, which is certainly of the Persian period, is even a little to the west of north; so is also the great tomb No. 77, which is probably late in the twenty-sixth dynasty. Note also the two tombs marked "earlier" and "later."

A far greater number of tombs were excavated than those here shown on the map—many times more than these in fact. But nearly all which were of interest from their form or contents have been planned and mapped. A few were lost from the record, as their numbers (which I always cut deeply in the brick walls with a knife) crumbled away while Mr. Griffith was finishing the excavations before my return to Nebesheh to make the plan. Otherwise, the record of all that was noticeable is complete.

There are here two entirely separate classes of tombs, if not three (see pl. xv. and xvi.). First, there are the great hoshes (as they may be called, from the Arab name for a large chambered tomb building), which were certainly built on the surface of the ground, and rose to probably 10 or 15 feet in height (see No. 76). The chambers in them sometimes communicated with one another, but no instance of an outer doorway is seen, and it rather appears that the access to the chambers must have been from the top, as in the subterranean tombs. Many of these have been rebuilt, sometimes two or three times, on the same lines, and many reinterments have taken place in them. Their state is consequently very confused; but in no case have I found anything earlier than the twenty-sixth dynasty, and they seem to have come into use at that time. The second class is entirely subterranean, with wells of access built by the side of the tombs, and provided with foot-holes in the sides (see Nos. 42, 20). The entrance to the tomb from the well is always carefully bricked up. Very usually there were two or more chambers opening off a common passage (see Nos. 1, 38). These tombs

when more complex, as in No. 31, developed into hoshes, as in No. 28, which is nevertheless still subterranean. They also were lined with stone in the twenty-sixth dynasty (No. 46), and all such tombs have a wide well of access, with one or two ledges narrowing it part of the way down, on the side opposite to the doorway. These tombs developed into what must be reckoned a distinct class, the third; these are large square hollows, such as the Psamtikmenkh tomb, No. 77, which is 60 feet square, lined with brick walls and having stone chambers built in the space, and filling it up to the lining with a mass of constructions.

The positions of the bodies are not constant, though they generally lie east and west. Those planned in pl. xvi., and some others noted, give the following results:—*Ramesside*. Head 2 E., 2 W., 1 N., 1 S. *Cypriote*. 6 E., 1 S. *Saite*. 17 W., 3 N. Here a very clear distinction between the classes may be seen. The Ramesides were nearly indifferent, but the Cypriotes were exactly the reverse of the Saïtes. As the Cypriote tombs are, at least in part, contemporary with the Saïte, this complete contrast shows a real and important distinction between the two classes. The position of the tomb well of entrance does not seem so fixed; though usually on the east, the Saïtes—who were most regular in placing the bodies—yet placed the well on the east or west indifferently.

18. The earliest tomb opened, was one built of red baked bricks, No. 35, almost at the extreme east of the cemetery. It had been much disturbed and broken up in early times; and I could not plan it, as the people fell on it in the night after we found it, and carried off all the bricks. This was early in my residence here, and before I had them well in hand; but it gave occasion for me to promise so absolute a decree of dismissal against the whole village, if any further disturbance of my work took place, that I never had a brick or a stone removed afterwards. This tomb was of Pa-mer-kau, ac-

according to the two limestone ushabti found in it; and from a statue found in the temple, representing Merenptah, son of Pa-mer-kau, and bearing the cartouche of Ramessu II., it may be dated to the nineteenth dynasty. The style of the two ushabti (see pl. i., top line, numbered 35) also exactly accords with that period; and some fragments of wrought granite found in this tomb, again agree to a Ramesside period.

The employment of red brick in this tomb, and in the next to be described, which is also Ramesside, is of great importance. Hitherto I had never seen any red brick in Egypt of earlier times than the Constantine period; and it appeared to be a test of that age. Now we see from these cases, and from the discovery of red brick beneath the black mud brick of the twenty-sixth dynasty, at Defenneh, that baked brick was introduced in the Ramesside times in the Delta. There is, however, a distinction between these and the Roman bricks in point of size; those in tomb 21 are 13·5 inches long, and at Defenneh, 12·6; whereas the Roman are usually 8 or 9 in., and only at Dendera rise to 11·7. These early bricks seem to have been made much like the thick pottery coffins as to material; and differing in size as they do from other Ramesside bricks, they rather seem to be classable with the large articles of baked clay than with the crude mud bricks.

The next tomb in point of age is No. 21 (pl. xv., xvi.). This is entirely of red baked bricks, placed together dry, and irregularly bonded. The shaded part in the plan was of brick on edge; the rest of the bricks flat. The N. wall ran across the foot of the coffin recesses; and all the walls rose around the group of recesses, in a square well, to several feet high. The upper part had been disturbed in later times and much denuded, so that no further details could be obtained. The coffin in the E. recess was either of the slipper or lid type, not of two large pots mouth to mouth. It was of very hard, good pottery, painted with yellow bands outside on the red surface. On the outside, beneath the head, was a black line traced,

forming an ellipse $4\frac{1}{2} \times 4$ inches, and the sand stuck to the pottery within the line. Over the head of this coffin were the two ushabti marked 21 on pl. i., made of rough red pottery; these are of a style never found again at Nebeshch. With these, over the head of this E. coffin, was the upper scarab marked 21 on pl. i.: by the name *User kheper ma*, it represents Ramessu V.; it is made of schist, white, and has been glazed. In the N. part of the middle coffin was a large heart amulet of red glass, decomposed to green on the surface. In the W. coffin was the lower scarab marked 21 on pl. i.; it is clearly Ramesside in style, and from the occurrence of *Si-Neit* in the titles, may be of Ramessu XIII. (Kgsb.); the character of the cutting is like the scarab exliii. of Mr. Loftie's collection, which is of the same period; it is made of highly polished dark green jasper. These scarabs and heart amulet are now at Bulak. Probably also of the twentieth dynasty is the tomb of Nekht-Amen, No. 31. This was disturbed by the Arabs before I began to work that region, and they brought me six glazed-ware ushabti of the type marked 31 on pl. i. Further working here brought out pieces of the beautifully engraved alabaster vase (marked 31 also) and the two plugs of alabaster, probably from the ears. These objects were in the S.W. corner of the chamber containing the two coffins; probably the tomb had been rifled in early times, and the alabaster vessels smashed up in this antechamber. The southern chamber of the tomb was almost entirely lost by denudation, though more remained of the others owing to a great sand hillock rising on the N.E. side. The chambers were floored with bricks two deep, and were all mud plastered and white-washed inside.

Slight remains of other tombs, probably of the same age, were found on the S. side, and on the top of the same hillock; also remains of fine work in granite, &c., from destroyed tombs E. of No. 25. Further to the N.E. were more tomb chambers, No. 41, and in the N.W. one of the group were the two alabaster vessels, marked 41,

pl. i., standing in the S.W. corner; and in the same chamber three terra-cotta ushabti of Patekh, of the type marked 41, pl. i. From the style of the alabaster vessels and the ushabti it is almost certain that this tomb is of the twentieth dynasty.

Another early tomb of the nineteenth or twentieth dynasty was found at No. 4 (pl. xv., xvi.) with two limestone ushabti, see 4, on pl. i.

19. The best group of tombs of the twentieth dynasty was that of Ha-ra and Ra-mes-nekht, Nos. 3, 5, 7, and 8. The objects from these tombs are all on pl. ii. Tomb 8 I cleared entirely myself, and so it is certain that the very varying styles of the ushabti were all really found together. Beneath the coffin of pottery, which lay on a raised bench of brickwork covered with cement, were the ushabti, of sandstone, of limestone, and three of pottery beneath the head, and of limestone and two of pottery beneath the feet: they lay pointing in all directions. Across the head was the food vessel. That such very diverse types of ushabti should all be not only of one period, but belonging to one interment, is a strange and unexpected result. From the style of the stone ones, and from the green glazed ones of Ra-mes-nekht in tomb 3, it is fairly certain that this set of tombs is of the twentieth dynasty. Two heads from the pottery coffins, painted with black, red and yellow, were sufficiently well preserved to bring away; and parts of the coffins were brightly coloured with stripes of the same paint. The square box of pottery, found in tomb 3, is unhappily much broken up; it appears to have had a lid fitting in the groove around the top, and the pottery jackal of Anubis most likely was couchant on the lid. We now know from this tomb the age of several varieties of ushabti, and of these painted pottery coffins.

Tomb 27 (pl. xv., xvi.) appears, from the style of the ushabti, to be rather later, but still long before the Saitic renaissance. We may provisionally call it of the twenty-second dynasty. It had been nearly denuded away, and the contents had

been smashed up in early times, but I carefully cleared out what remained. The broken alabaster vessel, marked 27, right side of pl. i., had apparently a lid of slate (shown above it), with a knob of alabaster to cap the pin on which it turned, and another knob to serve as a handle. Beside this were pieces of a bowl, a small dish, and a symbolic eye, all in alabaster; pieces of two cups, one with a spout, made of blue-green glazed ware, ribbed; and five ushabti of blue-green, very rudely painted with black. All these are marked 27, pl. i. There were also pieces of an ivory flask, and of a blue glazed flat dish, rather like the colour of Roman glazed ware.

20. We now come to a wholly different class of tombs, which, from the pottery found in them, I have called here Cypriote. Though such pottery was not found in every tomb so named, yet as the bronze spear-heads and forks often accompany this pottery, and are never found in purely Saitic tombs with ushabti, I include them in this class. The Cypriote class, then, may be defined as having Cypriote pottery, or bronze spears or forks, and never having any ushabti. Moreover, as already noticed, the bodies always lie with the heads to the E. or rarely to the S., and never to the W. or the N. as in the Saitic tombs.

Yet we must not conclude that these belong to a wholly different period to the Saitic tombs; on the contrary, it will be seen on pl. xv. that tomb No. 2, a great brick-lined well of Saitic work, has cut into the corner of the group of Cypriote tombs, Nos. 17, 18. Hence 17 and 18 must have been disregarded when tomb 2 was made. Yet, on the other hand, after tomb 2 was ruined, and the stone sarcophagi in it smashed and looted, a later interment in a pottery coffin was made over them, and yet later still an interment near the present surface, with a bronze spear-head of the Cypriote class. Thus it is clear that these Cypriote tombs began early in the twenty-sixth dynasty, and probably lasted till the middle of the Persian period; perhaps even extending beyond

these limits. From the pottery, the spears, and the entire absence of ushabti, it seems certain that these belong to a colony of Cypriote mercenaries, brought over by Psamtik I. when he settled the Carians and Ionians at Defenneh, one day's journey to the E. of this site; and that this colony lasted for some two centuries or more.

As the contents of these tombs are nearly all illustrated on pl. iii., with the numbers of the tombs to which each object belongs, and the tombs are planned on pl. xvi., and mapped on pl. xv., it is only needful to notice such as were peculiar. The only tomb containing iron was 17, which contained both bronze and iron spear-heads in the positions shown in the plan. In the same tomb was one of the best preserved pottery coffins, the lid of which has been brought away, and is represented on pl. i. It has also a curious round hole, made intentionally, in the head of the coffin. Tomb 26 is of interest as having three gold earrings (see pl. viii., fig. 18) and a rude glazed scarab (fig. 19), together with an indistinct blue glazed figure of Mnt. Tomb 33, beside five vases of pilgrim bottle type, had the curious vase in the mid-bottom of pl. iii., and pieces of pumice, sandstone, and alabaster, together with apparently a bronze knife, with hilt-plate and finial for the end of the handle (see pl. iii.). The positions of the spear-heads and forks, whenever noted, are marked on the plans.

The use of the curious bronze forks here found, is still undecided. They are generally found along with the spear-heads; yet they cannot be weapons, as they are never sharpened, and they frequently have a cross-bar. This bar also prevents our thinking them to be fishing spears. The only explanation that occurs to me is that they were the shoeing of the butt ends of spears. It will be remembered how the Egyptian sceptres always end in a fork at the base, which suggests that such a type was familiar. Again, for utility, it was needful to have a point which could be driven into the ground, to stand the spear upright; and yet a means of fastening a leather thong on to

the butt end, so as to get better grip of the spear in charging, would not be at all unlikely. On the whole, therefore, it seems probable that the butt ends of the spears had a fork on them to stick in the ground, and to put a thong over, which could be fastened to the hand; and that a later form had a bar across the fork to prevent the thong slipping off in action. The fork from tomb 24 was intended to fit on to a naturally forking staff of wood.

The presence of this Cypriote pottery so commonly here, in the beginning of the twenty-sixth dynasty, suggests that it was really from this type of pottery that the Egyptians formed the "pilgrim bottle" type of red pottery made on a sand bag, and of green glazed pottery so often found with lotus necks, and inscriptions impressed down the edge. Such forms are, so far as I remember, unknown in Egypt until the Cypriote types were introduced.

21. The Saitic tombs are characterized by the stone sarcophagi, and the abundance of ushabti. As Mr. Griffith will describe the ushabti as a separate subject in Chapter V., there is not much to be said here of these remains. The usual course was to place one or two finely inscribed ushabti, with several rougher ones, and a few hundred small uninscribed ones, in a wooden box in the tomb. Generally the outline of the square box-full could be traced on clearing the ground. Thus in tomb 11 (Plan, pl. xvi.) were 11 ushabti together, and only one inscribed; again 16 ushabti, and only one inscribed, lying parallel, one on the other, with feet broken off. In the next chamber was a box with 5 ushabti, all plain; then a wooden box, which had been 26 inches square and 15 inches high, had contained 45 ushabti, of which only 5 were inscribed. This tomb had part of a wooden flooring and panelling which had been covered with stucco; possibly, however, this was part of a large flat coffin placed close against the wall. In tomb No. 39, again, were two boxes of ushabti; one had been about 17 inches square, and contained

154 ushabti ; and another, $19 \times 12\frac{1}{2}$ inches, had 171, of which only 3 were inscribed. In tomb 46, which is stone lined, with a brick well of access on the west side, was a box $19\frac{1}{2} \times 22$ inches, with 204 uninscribed ushabti ; and another heap of 62 more, pell-mell in the corner. In tomb No. 39 (map, pl. xv., not planned) was a box of plain ushabti, lying on the legs of the two mummies.

The great tomb No. 77 is probably the finest of all in the cemetery. It still has the sarcophagi *in situ*, and the limestone pavement ; but the whole of the stone structure which has stood in the great lining of brickwork has been removed. The two western sarcophagi are of limestone, rough-adzed on the outside, and with a band of hieroglyphs running all round on each of them. The inscriptions record a chief secretary of the city Am, Psamtik, son of Uat-em-hat ; and Psamtik-menkhab, son of Aset-khebt, who held the same office. The great sarcophagus is of polished basalt, with the usual head, collar, and columns of inscription on the lid, found on the best examples of the twenty-sixth dynasty ; the body of the sarcophagus is also of basalt, and has a line of titles around the upper part. The whole is encased in an enormous outer case of hard limestone, the body part is cemented in, and the lid was covered with a corresponding block of limestone. It belonged to Psamtik, son of Paserf and his wife Naisharu. For the inscriptions see Chapter V.

In the tomb 60, on the N.W. of the cemetery, is a similar coffin ; but as the huge upper block has been only broken away, and the basalt lid

broken up to force an entrance, this is in a very bad condition.

Tomb No. 42 of Pet-amen has another fine sarcophagus in it, but entirely of limestone ; the lid sloping to a flat space along the middle, on which is a column of inscription of Pet-amen, a general (mer-mashau), son of Psamtik-mer-ptah and Ta-asar. This again mentions the city Am. The bricks of this tomb are $14.1 \times 6.9 \times 5.0$ inches.

Out of the hundreds of tombs which we cleared, very few proved to have been unrifled before, and only one contained the bodies with a full supply of amulets undisturbed. This was tomb 23 (map, pl. xv.), where in seven chambers we found one undisturbed (marked with a spot), and in this were four bodies lying as in the plan (pl. xvi.). There were traces of the paint of wooden boxes left, sticking to the walls against which they had been placed, although the wood had entirely disappeared. It seemed that there had been wooden canopic jars, wooden boxes, and a wooden door just inside the bricking up of the doorway.

22. The amulets found on the four mummies were all carefully collected, and (excepting what were accidentally disturbed in A by the workman's pick, before the bodies were seen) the positions of nearly all of them were noted. I have mounted each set on a card in their original order, and noted the positions. Bodies A and B contained stone amulets, and bodies C and D, green glazed pottery amulets of fine work. The positions were :—

| | A | B | C | D |
|-----------------|--|---|----------------|-------------------------------------|
| Between eyes | ... .. | ... .. | ... .. | { 6 uræi { 1 eye |
| Mouth | ... .. | Tongue piece (limesn.) | ... .. | ... .. |
| Back of neck | ? Counterpoise (g. fels) | { Counterpoise (g. fels.) { Eye (limesn.) | } Counterpoise | Counterpoise |
| Throat | ... .. | ... .. | ... .. | Square eye |
| Below | ... .. | ... .. | ... .. | { Scarab with legs { Double disc |
| Below | ? Serpent head (agate) | ... .. | ... .. | Serpent, neck and head |
| On collar-bones | ... .. | ... .. | Heart | |
| Right wrist | ? 11 beads, (agate, lazuli, white quartz, beryl, jasper, syenite, brown silicate, red and green glass) | 9 beads (agate, black silicate, beryl, green glaze pottery) | ... .. | 9 beads (possibly on neck) |

| | A | B | C | D |
|---------------------|---|--|--|--|
| Left hand | ... | ... | Ring, scarab, steatite eye | ? Scarab and ring |
| Top right breast | ? Frog (lazuli) | ... | Frog | |
| Left breast | ? Square (lazuli); ? 9 hearts (agate, beryl, obsidian, basalt, wt. limestone, lazuli, brown, brown and white, and green silicates); ? Papyrus on tablet (beryl); ? Strips gold foil. | Frog (g. fels.); 4 Hearts (basalt, limestone brown and white, lazuli); Square pendant (lazuli); Scarab (limestone) Plummet stand and square (basalt) | ? Girdle tie (red glass) Square pendant (limestone) | |
| Above heart | ... | Double feathers (basalt) | | |
| Heart | Plummet stand and square (basalt) Large scarab (greenish syenite); 6 Scarabs (obsidian, syenite, beryl, brown silicate, greenish syenite, wt. limestone) | ? Large scarab (slate) ? Scarab (basalt) Gold foil uræus 2 Eyes (limesn. and calcite) | ... | Large scarab (brown basalt) |
| Left of heart | ... | Gold foil uræus 2 Scarabs (basalt) | | |
| Across chest | ... | ... | L. Human head hawk Tabuti Serpent Triad Scarab with legs Isis R. Nebhat Horus Tat | Triad, Hawk, Hawk, human headed. |
| Lower part of chest | ... | L. Altar? and scarab (limesn.) 2 Eyes (g. fels.) mid., Horus (lazuli) | | R. Ape L. Anubis (alabaster) R. Nebhat Neit Isis L. Papyrus ? Tahuti |
| Bottom of chest | ... | Square pendant R. Eye (basalt) Gold foil uræus | ... | 2 Hearts (red glass) R. and L. 3 Tats |
| Stomach | 2 Eyes (red glass, lazuli); 4 Tats (obsidian, lazuli, cornelian, br. and wt. silicate); ? 3 Girdle ties (obsidian, red and brown paste) ? 2 Discs on stand (basalt) | ... | 2 Tats | 4 Tats |
| Navel | Square pendant (limesn.) ? Papyrus (g. fels.) Plumes (obsidian) ? Feathers (lazuli) | Girdle tie, red glass Disc on stand and heart (g. fels.) | Girdle tie (red glass) 3 Tats 2 Serpents | |
| Lower part stomach | ... | ... | Serpent Papyrus | |
| Pelvis, top | ... | ... | ... | Plumes (brown glass) Feathers (alabaster) |
| „ right | ... | ... | ... | |
| „ R. by spine | 3 Eyes (obsidian, hæmatite, green silicate) Eye (limesn.) ? Double fingers (basalt) | Eye (red glass) | | |
| „ middle | ... | ... | | |
| „ left | ... | Double fingers (basalt) | ... | ? Double fingers (black glass) |
| Between thighs | Eye (jasper) | | | |

(Limesn.) = white limestone; (g. fels.) = green felspar.

From these many positions of amulets are evidently constant; such as the *menat* counterpoise behind the neck; frog at top of chest; plummet stand and square by heart; large scarab at heart, and smaller ones with it; the triad (Isis,

Nebhat, and Horus), and other divinities across the chest; the Tats in the stomach; girdle ties of red glass at the girdle; eyes in the pelvis; double fingers in the left of the pelvis. Many other positions are indicated here, but not confirmed

by several examples. The body B was pitched and gilt, eyes inlaid with white glass and thin glass edging.

Beside these, some other sets of amulets were found, but not in position on the bodies, and therefore not needing notice in detail. But of types not included above are, in tomb 39, the sun on the horizon; cartouche plaque, plain; breasts?; and in tomb 49, Tat with feathers; disc with feathers; and head-rest.

23. In the S.E. corner of the great *hosh* No. 76 we found, high up, a tetradrachm of Alexander III.; below this level a great miscellaneous bed of loose bones, ransacked out of tombs near, and all thrown in together; below that two sarcophagi built of stones and mortar, one of large blocks well laid, the other thinner; and below these again, at the bottom, the remains of a rich interment. There were silver cases for the fingers, and portions of foot-cases of silver with the toes modelled on them; 15 silver gilt figures of Neit seated, 3 of winged Isis, and an eye, similar. Cow's head in red glass; green jasper scarab, large size, from the heart; square and altar of Bast in lapis lazuli. Also great quantities of beads, over a dozen pounds weight; these are mostly of blue paste, some gilt; many hundreds of lapis lazuli, but mostly made in two pieces cemented together to save the labour of drilling the hole, which could thus be made by a saw-cut; many dozens of small round carnelian, of blue glass sloping to a ridge around the middle, and of silver made by coiling a piece of sheet silver. This interment, which from the style could not be dated before the twenty-sixth dynasty, had been made before the *hosh* was built in its present form, as a great deal was taken out from under the walls.

Among other articles from the tombs may be noted the large bronze pail and lid (pl. xx. 5), found deep in the sand in tomb 16. The pail has been wrought in one piece, with handles riveted on; and the lid seems to have had a leather (?) handle riveted on it. A pottery jar with two

demotic inscriptions was found in the *hosh* W. of No. 76. In tomb 25 we found a few amulets and part of an armlet of horn, such as are known from Thebes; this is fixed by the amulets to the twenty-sixth dynasty. In a tomb S.W. of the plain, towards the town, some Arabs found a set of gold foil objects, shown in pl. viii. 10 to 17, which look most like Ptolemaic work. In another tomb near that, two large scarabs of jasper and basalt; two carnelian eyes; three crescents, tongue-piece, and figures of Hapi and Tuaut-maut-f, all in gold foil; with a quantity of small blue glazed beads.

In a late tomb in the plain, No. 70, was found a number of beads of glass, pottery, bone, and vertebræ of fish, which are shown in pl. viii. 1: with these was an oval plano-convex piece of dark green glass, polished, for setting: as several small brass coins of Constantine II. were found with these, they may be dated to the middle of the fourth century A.D. In some other interments in the mound on the extreme E. were five brass cymbals, a turned bone pot (gnawed by rats), and a clear glass flask with wavy brown rings on the neck; the neck of a glass flask, with a bronze handle looped in the ears; also a piece of a pottery mould for making patterned pottery, scribbled on in Cufic; and some pieces of very coarse black wrapper. The interments here seemed to be of various ages, some poor ones perhaps only a century or two old, but the cymbals and flask were probably of the Byzantine or early Cufic period.

Among miscellaneous objects from tombs, of which a great quantity of amulets, &c., were obtained from the Arabs, a few require notice. A double Tat, joined by the sides, in schist, glazed; plaques of bright blue glaze, with four deities (viii. 2); an ægis of Bast in blue, with yellow facing to the disc and bands (viii. 3). Quadruple eyes, two plaques, 2 inches long. Amulet of greyish green glaze, about thirtieth dynasty, in form of a *kalantika* wig (pl. viii. 7). Bes seated, fine work. Large plaque with head of Bes, 2 inches wide. Lotus flower of blue paste (viii. 6).

Blue glaze flat cups, $1\frac{5}{8}$ and $2\frac{1}{4}$ in. across. Bronze Osiris, poor work, on original wooden base. Limestone Isis, of Ramesside period (?), on original bronze base, $2\frac{7}{8}$ high. It is evident that a large amount of sepulchral objects may still be obtained from this cemetery; but it is doubtful whether much of interest or of scientific value would repay the time required.

CHAPTER IV.

THE TOWN.

24. We may begin by noticing the slight remains of a building, which, though in the cemetery, is not a tomb, but rather the site of a small chapel. Just north of tomb No. 42 will be seen (pl. xv.) the site of a "Destroyed Limestone building." Nothing remains of this but the retaining wall of the foundation, and a quantity of chips of limestone; but in tracing it out the digger came—to my surprise—on a foundation deposit in the N.E. corner, of which he preserved only the mortar and a plaque. The S.E. corner I carefully cleared myself, obtaining the set of objects shown at the foot of pl. xix. Their positions are shown on the plan at the top of pl. vi. This more resembles the Ptolemaic deposits of Naukratis than the deposits of Nebesheli and Defenneh of the twenty-sixth dynasty; and it seems probably as late as the Persian period at least. No name is marked on the plaques. No trace of a deposit could be found in either of the other corners. The enclosure measures 697 in. N., 712 S., 408 E., 405 W.; so the building must have been about 57 feet \times 33 feet.

25. Turning now to the town proper, there will be seen on pl. xvii. a plan of such parts of it as have been cleared by the natives in digging for earth. As I have not before seen a site on which they have so consistently carried away the filling and left the walls, this offered a good opportunity to get a plan without spending the time or money

required to excavate it. It will be noticed that though several long lines of street may be followed, yet the houses are mostly separate *insulae*. In several of them we can see the one larger space, sometimes indeed with an outer doorway into it, which was the open court off which the rooms branched. Such is now the almost universal form of even poor Egyptian huts, the court serving in such a climate most of the purposes of a room. But the greater number of the walls are evidently only the foundations, below the level of doorways, and so the internal arrangements are not explained. A few chambers were excavated, and some articles found; in chamber 99 a terra-cotta impression of a mould with a good head of Horus, of Ptolemaic work; a piece of a dark blue glazed cup, and a piece of an iron pruning-hook. Others of these pruning-hooks, probably for use in vineyards, were found in the town (see pl. vii. 14, 15).

26. The most important house we cleared was one in that part of the town which had encroached into the temenos of the temple. In the S.E. corner of the temenos is a considerable mound of house remains, and one house, No. 100, can happily be well dated by a find of twenty-five Ptolemaic tetradrachms which we found in it, the latest of which (in good condition) is of the year 4 of Ptolemy III., or 244-3 B.C. So the burning of this house and its contents can scarcely be put later than 230 B.C. Several curious objects were found in this house, as well as many ordinary things. On pl. vii. will be seen some of them. In bronze there is the jackal standard (fig. 3), the bronze bowl (fig. 6), and the little bell (fig. 4); beside these there were three large bronze nails, $5\frac{1}{4}$ in. long; Nefertum in bronze, large but worn; Osiris in bronze; and a piece of iron inlaid with strips of bronze. In stone are the small alabaster pot (fig. 2); a rude hawk in limestone; a marble foot from a statue of Greek work, $1\frac{3}{8}$ in. wide; a marble tongue-piece, such as those found with mummies; and a necklace of carnelian, onyx, and coral beads of

the globular, bugle, ribbed, and truncated paralleliped forms. In glazed ware are the pot (fig. 1), and the very curious draped figure (fig. 8) which seems to have been a small flask; also a scarab with legs, and an ibis amulet. In terra-cotta is the remarkable lamp (fig. 5) with a central open tube; the tube lamps of Naukratis all belonged to the sixth century, instead of the third century B.C., and are in a hard, close-grained Greek pottery: this is the only instance I know of a tube lamp of such late date. In ivory is the female figure (fig. 7) and a scrap of ornamental rod. The tetradrachms found (with the numbers in R. S. Poole's B. M. Catalogue of the Ptolemies) are of—

| | | |
|--------------------|------------------------------------|------------|
| Ptolemy I. | Cos? | B.M. 75 |
| | Alexandria? | 90 |
| Ptolemy I. and II. | EY | as 1 to 6 |
| | (but monogram VAP) | |
| | Cyprus | as 6 |
| | (but X for X) | |
| | Paphos | 16 |
| | Miletos | 57 |
| | Ptolemais | 87 to 88 |
| | and two worn. | |
| Ptolemy II. | Sidon | 32 |
| | (two examples) | |
| | Sidon | as 33 |
| | (but X monogram) | |
| | Sidon | 33 |
| | Tyre | year 22 47 |
| | Sidon | year 31 65 |
| | Sidon | year 32 68 |
| | (two examples) | |
| | Sidon | year 35 75 |
| Ptolemy III. | Sidon | year 4 20 |
| | (latest dated coin here) | |
| | Ptolemais | 36 |
| | Ptolemais? | as 47 |
| | (but Γ for X) | |
| | Ptolemais | as 74 |
| | (but with H Δ) | |
| | Ptolemais | as 74 |
| | (but with H H, three examples). | |

Beside these a small lot of eleven later Ptolemaic coins was found elsewhere in the town, and brought in by Arabs; they all date between 146

and 131 B.C., are in fine condition, and all of the Cypriote mints, Paphos, Salamis, and Kition.

| | | | |
|-----------------|---------|----------------|---------|
| Ptolemy VIII. | Year 25 | ΓA | B.M. 55 |
| (Euergetes II.) | 30 | ΞA | 17 |
| | 30 | KI | 34 |
| | 31 | ΓA | 4 |
| | | (two examples) | |
| | 32 | ΞA | 21 |
| | 32 | KI | 41 |
| | 33 | ΞA | 23 |
| | 35 | ΞA | 25 |
| | 39 | KI | new |
| | 40 | KI | 52 |

Another house cleared was apparently a workshop of about 200 B.C., by the side of the "Late Foundation," marked close to the S.E. corner of the great temple. Here were pieces of green felspar, rock crystal, and black schist, all in unwrought lumps. In blue paste—part of the wing of a statuette; piece of "pilgrim bottle," with the wish "Sekhet give a good new year to the owner;" ribbed cylinder with square hole in middle to fasten on a metal rod for furniture; a symbolic eye; and two star-pattern discs (pl. vii. 8), with two others of white paste. The pattern of these, which extends from the time of Psamtik II. (Tanis, pl. xii. 25), and is found in a highly raised form on bosses at Sueilen, is probably derived from the star-patterned echini so commonly found in the tertiary limestone of Egypt. Beside these were pieces of lapis lazuli and blue paste, formed for inlaying. In bronze—Horus, situla, and a cat, all 3 to 4 inches high; and some nails. The date of these objects is tolerably given by a small bronze coin of Ptolemy III., about 230 B.C.; as it was rather worn, the house probably belonged to about 200 B.C.

27. Of miscellaneous objects in terra-cotta from Nebesheh, there are figured in pl. vii. two pieces of statuettes of the Phœnician Venus type (figs. 10 and 12), possibly connected with the Cypriote mercenaries. A mould for a sistrum head (fig. 11). A remarkable figure, which does not seem to be an ushabti, but is more mediæval

than Egyptian in its appearance (fig. 20). A plaque with a female figure standing with the hands on the hips, and a vase beside her (fig. 23). Two rude heads of animals (figs. 17 and 19). A four-handled model vase (fig. 16), and a curious form of two-handled bowl in hard, smooth pottery of dark brown colour. Also, not figured, several small long-necked flasks of dark brown pottery, with loop handles, such as are often found in Cyprus and in Egypt; until their age shall be established, their origin must remain unsettled. Also a piece of pottery painted with a cross-line pattern in brown on a white ground; as this is not like late Roman, it is more probably of the beginning of the twenty-sixth dynasty, when the Ramesside painting still lingered in a very rude form.

Of stone objects there is a recumbent female in limestone, like those figured in "Naukratis" (xix. 9), but of rather better work: this seems to show that such figures are Egyptian, and not Greek. A whetstone, $5\frac{1}{2}$ inches long, of dark green fine-grained stone, and well shaped. Two small alabaster vases, with very rude lotus pattern. A Benu mould in limestone. A piece of a trachyte corn-rubber (pl. vii. 21). Right-angled pieces of black trachyte are often met with in late sites, and hitherto their object was unknown; at Naukratis and Nebesheh, this year, pieces with a wheel on the side were found, and this implied that some motion was connected with them; at Defenneh I found pieces which plainly showed them to be corn-rubbers. Made of a flat slab, with a slit down the middle nearly from end to end, the sides sloped down to the slit, out of which the corn passed to be rubbed on the slab below; the small plan and section with fig. 21 show the form. Three dice of limestone, large crystal of calcite, and a rock-crystal seal of Pehlevi period.

Of bronzes, a king kneeling, 15 figures of Osiris, 5 of Har-pe-khruti, 5 of Nefertum, 3 of Khem, 3 of Isis and Horus, and 1 of Khonsu. Flat bronze head of Isis chased both sides. It is

head, Triad, Khem, Amen Ra, and Horus. Three beards; a uræus inlaid with red glass and gilt; Osiris feather, 7 in. long; and feathers of Osiris with uræi pendants. Situla with swing handle, 4 in. high. Situla $5\frac{3}{4}$ in. high, with incised figures. Model situla and basket. Bodkins (2), kohl sticks (8), arrows (16). Bowl, 6 in. across, $1\frac{3}{4}$ high. Plummet, $1\frac{1}{2}$ in. long.

We may also note an iron axehead 6 in. long, 2 wide, and $\frac{5}{8}$ thick. A slab of iron $3\frac{1}{4} \times 2\frac{1}{4} \times \frac{3}{8}$, found with the broken pieces of the sarcophagus in tomb 77. A base Athenian tetradrachm. An Athenian drachma. Silver ring with Har-pe-khruti (pl. viii. 4), which may be connected with the hieroglyph of the city of Am. A second like this was kept at Bulak. Two plain silver rings. Silver ring with gold foil inlaid (pl. viii. 5). Three silver earrings, and one gold. A piece of a throne of a large statuette of glazed pottery; on the back Horus holding a hare and another animal; Nebkau and cynocephali on the sides. A die of blackened bone; and a piece of skull, of the extraordinary thickness of $\frac{2}{3}$ inch.

The scarabæi only remain to be noticed. The whole of them are drawn on pl. viii. The general style characteristic of the Nebesheh scarabs is the small size, high finish, and often bright apple-green colour of the glaze on the pottery. Schist scarabs are not so characteristic here in their work, and do not so clearly belong to the place. Of scarabs most distinctly belonging to Nebesheh, we may notice 20 to 28, 33, 37, 44 to 48, 63 to 67. The Tanis scarabs, on the other hand, are nearly always of schist, and are often still smaller, as figs. 69, 71, and 80 to 83. The fig. 36 is not a scarab, but a little plaque of schist with Sekhet in relief on either side. The *hetes* scarabs (47, 48) are now known to be of Psamtik II., by a double name on one of Dr. Grant Bey's collection. No. 60 seems to read Ra-en-ka, but it is hardly to be supposed that a king of the obscure eighth dynasty would be noticed in the later times: it,

as well as scarabs 61 and 62 of Naukratis, is probably a blunder for Ra-men-ka, who was much noticed in later times. The most singular scarab to find is one of a queen Aahmes, who must be of the beginning of the eighteenth dynasty; and the work in clear carnelian is exactly of that period. Whether this be of Aahmes, one wife of Amenhotep I., or of Nofertari or Meritamen, it is the first fragment of the eighteenth dynasty which I have seen in the Delta. No. 63 is one of the well-wishing scarabs, "All good business;" and Nos. 65 and 66 the very usual "praise to Khonsu" or "devoted to Khonsu."

The Tanite scarabs were brought over by my workmen who came from there. No. 71 is of Sheshank I. or Takelut II. No. 75 proves that the bright Indian red glaze, of which I had suspected the genuineness, is undoubtedly ancient, and of the twenty-fourth dynasty; this also shows that the series of scarabs of possible vassals of Piankhi (Ra-men-kheper) do belong to the Delta, this one being of Ra-men-i. The others do not show anything of importance, beyond the general connection of the very rude schist scarabs with the San district. No. 81, of "praise Tahuti," is one of the smallest inscribed scarabs known.

CHAPTER V.

THE INSCRIPTIONS.

By F. LL. GRIFFITH.

28. The hieroglyphic inscriptions of Nebêsheh are fairly numerous, and add considerably to our knowledge of local history and religion in this corner of the Delta.

The inscriptions on the sarcophagi and temple monuments show that here were the city, temple, and cemetery of Âmt, capital of the nineteenth nome of Lower Egypt, Âm peh. This name was formerly identified with that of Buto, owing to the worship of Uat (Buto) as the chief divinity of the city. Dümichen in his *History of Egypt* had in 1879 shown that Âmt was not the same as Pauat (Buto), and Brugsch removed it from the N.W.

of the Delta to Pelusium by a guess not far from the truth.

In 1884 Mr. Petrie found at Tanis a chapel of the gods of Âmt, in which were limestone sphinxes and tablets (now in the British Museum). One of the tablets represented Ptolemy IV. Philopator? and Arsinoë giving land to these gods; another smaller one was a plain representation of Ptolemy II. Philadelphus and Arsinoë. This chapel was on the N. side of the road leading E. from the river to the temple (cf. Tanis, Pt. I., p. 31). Besides this, a similar scene of Ptolemy II. and Arsinoë offering land to the same gods was found on a large tablet discovered with a sphinx "just on the watershed at the S. end of the valley that runs S. from the pylon." From these discoveries it was concluded that Âmt was probably none other than the city of Tanis. A possibility of this remains still, but the site of Nebêsheh is quite important enough to be that of the capital of the nineteenth nome. The name of Âmt occurs continually on its Rameside and Saite monuments, and its great temple adorned with fine statues and monuments was dedicated to Uat of Âmt, a very different matter from the chapels at Šân.

Returning to the hieroglyphic name of Nebêsheh, Dümichen shows that the wine of Âmt was celebrated in the earliest times; while in Ptolemaic times wine was also imported into it from Syria. The land now would scarcely grow vines, being very salt, except southward along the edge of the desert about Salhîyeh and Fâqûs, where palm trees grow abundantly and to a great size. Some small sickle-shaped implements of iron, that were found in houses of Ptolemaic date at Nebêsheh, were perhaps used in vine-dressing, when under a better system of irrigation "the fields of Âanru," as the territory of this nome was named (like those bearing the same name in the lower world), produced rich corn crops, such as appear in the vignettes of the *Book of the Dead*, instead of the meagre and stunted growth of the small part that is still cultivable. At the present day there is only a very narrow strip of good land on the edge

of the desert, and every mile that one proceeds northward the land becomes rapidly more barren, until at Nebêsheh, six miles N., we reach the limit of cultivation, and north of that for miles no tilled ground is seen, except where a village such as Sâh, existing for other reasons, has contrived to till a small patch.

29. The earliest inscriptions of Nebêsheh are those upon the monuments of the twelfth dynasty in the small temple. Here were found three monuments of this date. The earliest is a large part of an altar dedicated by Âmenemhât II. The king is described as beloved of Osiris lord of Ta'ttu and of Anubis on his sacred mount (pl. ix. 1). These are the usual epithets of kings of this dynasty, and have no local reference. It is unfortunate that the dedication is imperfect, as it might have contained the name of the chief god of the city at that period. Inscriptions have been added in later times on the sides of the altar. A horizontal line commencing with the titles "*erpâ hâ*" appears on the top of each side (*i b* and *c*) with a vertical line (*d* and *e*) cut below it, giving the titles "the chancellor, the chief of the sealers *nub mertu*." Those on the right side have been almost entirely erased, while on the left they were allowed to remain, being probably out of sight. This side is now unfortunately much broken. The horizontal and vertical lines probably belong to the same person. The hieroglyphs are so rudely cut in both that they are difficult to recognize.

The other two monuments are thrones of statues (pl. ix. 2). The name of one is lost, but they appear to be a pair, and the name of the second was found on a fragment which fitted the throne, showing it to have belonged to a statue of Usertesen III. The name of the princess who stood at his knee is not legible.

The inscriptions of the twelfth dynasty are, therefore, without local signification. But from them we learn that Nebêsheh has to be counted with Sâh and Khata'neh as one of a group of

sites in this far-off corner of the Delta which was honoured by these early monarchs. It is strange that in the rest of the Delta, Heliopolis alone can as yet show a monument of equal age.

Perhaps from the same remote period date two sphinxes of black granite which were found in the gateway of the temenos. One is headless, and has been so for ages, the broken edges being worn smooth; the other is broken into small fragments. They seem to have corresponded exactly. An inscription cut in the rough style of those that were added to the altar ran round the base of each, but had been almost erased, having itself apparently replaced an earlier erased inscription. That on the right side of the base of the southern sphinx is given in pl. x. 6*a*. The left side is entirely erased. The remains of that on the northern sphinx are in pl. x. 6*c*. The legible part shows the end of a proper name, perhaps "Baï—says, I was . . ." and "says, 'I was chosen.'" This is the formula of a high functionary, not of a king.

The head of the sphinx had been recent before it was broken off. Between the paws and upon the breast were erased cartouches. On the right shoulder also was an erased cartouche over which Setnekht placed his ovals (pl. x. 6*b*). They are found on both the sphinxes, while Rameses III. chiselled his name lightly upon the front flaps of the wig of the southern sphinx. These early usurped sphinxes are a feature of Sâh, Nebêsheh, Khata'neh, Muqdâm, and Ismailiyeh (from Tel el Maskhûta). A fragment of another with part of the cartouche of Rameses III. lies exposed amongst Roman remains at Nebêsheh, W. of the huts of El Ebshâri.

30. The only remains of the eighteenth dynasty hitherto found in the Delta were in the south central part at Heliopolis and Benha. Nebêsheh, too, was under the ban, and a long blank follows the twelfth dynasty monuments and their unknown usurpers. Even Seti I. has left no record. Rameses II. perhaps built the great temple whose founda-

tions still remain there. He at least rebuilt the temple and pylon. Part of a black granite statue of a goddess or of Ptah lies in the temple of Amasis with the cartouches of Rameses II., "beloved of Sekhet, Uat, and Tum?" on the back support: the last figure is distinctly bearded, and wears the lower crown (pl. x. 7).

In the pavement at the gateway, but not built into the substructures, was a block with the titles of this king. He adorned the entrance with two large black granite statues of himself. The inscriptions on these are of no particular interest.

Several other monuments should probably be attributed to this period. In the great temple was a crouching figure of a functionary, life size, and wearing a large and carefully worked wig, upon whose knees between the hands was the cartouche of Ramessu Meramen the god (pl. xi. 16*b*). The statue represents the "*Pa ūrshī* (astronomer?) Merenptah, son of the judge and governor of the desert hill country, Pa-mer-qau, and of the singer of Uati Ta-usert," while a deceased son of his was "first prophet of Uati, named Se Uatī, whose mother was the *Ūrt xēnrāt*, Uatī. . ." (pl. xi. 16*g*.; cf. 16*c*). He was also entitled *qat'en* or "royal courier." He professes himself to be "the high priest of Uat" *Āmt* (pl. xi. 16*f*), "one near the noble portico? (of the temple) of the mistress of the two lands (Uat)," and calls upon the priests to offer food and incense to his statue (pl. xi. 16*g*). The statue was dedicated by another son, the priest Amen nu? as we are informed by a kind of graffito roughly chiselled on the right arm.

On the front of the garment below the knees is a curious scene of Uat, mistress of *Āmt*, regent of the two lands, confronted by a half-erased figure. This person's name and speech and Uat's speech to him have been carefully erased. The figure can scarcely have been a king, and at any rate not Rameses II., to whose period the statue undoubtedly belongs. Probably it was Merenptah himself, and the priests or the laity considered the scene a piece of presumption.

The family of Merenptah was an important one at *Āmt* for at least three generations, as we see by the recurrence of the name of Uat. Of his father Pa-mer-qau we probably have the ushabti. The name of Merenptah occurs also on a fragment of another granite monument from the small temple.

Uat is supreme again upon the monument of black granite found in the small temple, which represented three figures seated before two altars (pl. x. 5). The inscriptions are cut on the front of the altars. The columns succeed each other from left to right, but the inscription in each column reads from right to left. Before the first altar was one figure. Funeral offerings are demanded of Uatī, lady of *Āmt*, for the judge *Āī* by his son, the royal scribe Khemmes. Before the next altar are two persons. Similar offerings are demanded for Rennefer by her son, the royal scribe Khemmes, and finally in a longer inscription funereal offerings are prayed for from "Uatī, lady of *Āmt*, on the occasion of the feast of Uatī lady of *Āmt*, in the month . . . on the 15th day, the feast of the new year, the feast of Uag, of Thoth, of Sokar, of the going forth of Khem, in the feast of the beginning of the season, each one that takes place in this temple of the two justices, to this great goddess, mistress of the two lands, for the *qa* of the *erpā hā* superintendent of the prophets of Menthu lord of Uas, the chief superintendent of the buildings in the temples of the gods of the north and south, the superintendent of the cattle of Amen (this god's name has been altered probably owing to another mistake of the engraver) the scribe of the king loving him, Khemmes."

His office in connection with the temples of Upper and Lower Egypt is a sufficient reason to explain the discovery of a monument of this Theban functionary in the temple of *Āmt*. His name is a common one at this period. At Edfu the date of the feast of Uat is from the 12th to the 17th day of Payni.

Another monument probably of this time is a

small crouching figure in black granite of Amen-hotep (pl. x. 15). He invokes Menthu, lord of An or Hermonthis, and calls himself scribe of the district of Ani and priest of Menthu. It is a puzzle to know why this statue should have been found here in Lower Egypt. There is no local reference to Amt, or even to Lower Egypt, in any remaining passage of the inscription, which is nearly perfect. Amenhotep is a name belonging to the eighteenth dynasty. Perhaps for some reason his family had to flee from Upper Egypt, and carried with them the statue of their ancestor.

This figure was not found in the temple, but was brought to our hut a few days after our settlement at Nebêsheh, and sold to us for a few shillings. Its weight would prevent its being brought from far.

The name of Merenptah, successor of Rameses II., was found on a block of limestone built into a tomb in the cemetery. He also left an unusual monument in front of the gateway of the enclosure. Here a red granite column surmounted by a colossal hawk overshadowing a small kneeling figure of the king bears upon its sides the standard name of Merenptah (pl. x. 9a), alternating with figures of Amen rā neb nes tani (pl. x. 9b) and Merenptah exchanging figures of *māt* (Truth) with the god for victory.

At the beginning of the next dynasty comes Setnekht, who chiselled his cartouche upon the sphinxes in the temple (pl. x. 6b). His son Rameses III. did likewise, and his cartouche is found on the fragment of another sphinx (see above), and in a rather unusual form upon a block of pavement in the gateway (pl. x. 8). Another limestone block (pl. x. 10) built into the pavement of the gateway of about this period contains the titles of Horbehud of Edfu, who was also god of the capital city of the fourteenth nome of Lower Egypt; but perhaps this is only from the representation of the god (the winged disk) usually placed over the entrance to a temple.

A fragment of limestone with hieroglyphs in

relief was found at the gateway, and two more in the great temple. The style is that of Seti I. One of the blocks at the S.E. corner of the great temple was engraved underneath with the curious mason's mark (pl. xi. 17), which is therefore probably of the nineteenth dynasty. Another uncertain fragment of this period (pl. xii. 4) contains the title of a priest of Amen rā neb nes tani, and probably came from a tomb. It is very finely cut. Other traces of rich tombs of this period exist at Nebesheh in small fragments of sandstone sarcophagi with elaborate sculpture.

After Rameses III. there is a complete blank until the twenty-sixth dynasty.

31. I have hitherto neglected to speak of the ushabti found in the cemetery. Before proceeding to the inscriptions of the twenty-sixth dynasty, I will make a few remarks on those figures that can be placed earlier (cf. pls. i. and ii.).

The principal distinction between the early and late kinds of ushabti is that the Saite type is that of a bearded, mummified figure, resembling Osiris, placed upon a square base; the earlier type being beardless, not so completely mummified, and without either back-support or stand. The former at Nebêsheh stood up in their boxes, the latter were lying down, as far as could be ascertained, beneath the earthenware coffins; but nearly all the early tombs had been disturbed. In the early ushabti the elbows almost invariably project, and the arms are frequently traceable and crossed upwards instead of horizontally. These early statuettes show much more variety than the Saite, which seem never to depart from the closely mummified type, while the former often approach the figure of the living person.

The collection from Nebêsheh contains specimens of various materials: limestone, sandstone, red pottery, and glazed ware. The style varies according to material, but all these materials are found together in one tomb, the group of chambers 3, 5, 7, 8.

The red pottery specimens are the most clon-

gated, and the porcelain the most stumpy. The single specimen of sandstone is rather stumpy, the limestone specimens are less so.

Those in stone and red pottery have the features clearly marked in the cutting and moulding. Those in red pottery have been moulded in front, the lump of clay in the mould being then roughly shaped with a knife; the marks of this shaving are often apparent on the side and back. The end of the figure is bent forward at the feet, without any stand being formed.

In the porcelain specimens the features are very slightly indicated in the moulding, and colour laid beneath the glaze was depended on for marking details.

The legs and feet of the figures of this period are very shapeless.

The earliest specimens to which a date may be assigned, are those of tomb 35. The inscription (pl. xiii. 35a), now almost entirely lost through efflorescence of the salt contained in the limestone, seems to have been . . . *mer qau* in half hieratic script. This may be compared with the name, *Pa mer qau*, of the father of Merenptah on the statue of the latter in the great temple, unless it is a title as on the group of three figures. They were found amongst the rubbish of a destroyed tomb in which red tiles had been used. (Two specimens, fair work, limestone, rounded from back to front, crossed hands hold two hoes, basket hangs between shoulders, wig painted black, straight lappets, inscription in thick black hieratic in vertical lines (?) $5\frac{3}{4}$ inches (elongate) and $6\frac{1}{2}$, nineteenth dynasty).

Tomb 31. Six specimens porcelain, pale yellow-brown glaze, inscription lines, and features dark brown, *sh't' Asâr adennu n pa âmen Neẖt âmen*, "lieutenant-governor of Diospolis Nekhtâmen." Diospolis in the Delta was probably the same as Pachnamounis, in the direction of Damietta, near the coast. Inscription in horizontal lines in front, finishing with a vertical line down the back, figure holds two hoes, and basket between the shoulders, straight lappets, legs rounded. The best of the

early ushabti from Nebêsheh, 5 inches (nineteenth dynasty).

Tomb 41. Three specimens, inscription, *sh't' Asâr Pa teẖ* . . . ? now illegible, red clay, well made, lips and implements coloured red, hair and inscription black. One entirely painted with reddish stucco, lappets straight, $6\frac{1}{2}$ inches; found with two large alabaster vessels (nineteenth dynasty?).

Tomb 4, two specimens limestone with incised inscriptions illegible, 7 inches, one rather flattened (nineteenth or twentieth dynasty).

Tomb of chambers 3, 5, 8, 7. 7 and 8 are two parallel chambers, crossed at the end at right angles by 3. 5 seems to be a later addition. 7 is the innermost, a man entering 3 from the added 5 passing through 8 into 7 (cf. pl. ii.).

7. Two specimens red pottery.

8. One very heavy features and stumpy, red pottery. Three slender, red pottery, one being coloured yellow. These are marked with incised lines (pl. ii. 8) in front below waist.

Also two specimens limestone, 6 and 7 inches, rather flattened, holding two hoes. Wig curves away over back; lappets, small and pointed, come out in front from beneath the wig.

Also sandstone one specimen, $7\frac{1}{4}$ inches, coloured red; inscription incised, hair &c. and inscriptions coloured black. Tunic projects in front; holds hoe in right, broad-bladed hoe with cross-bar in left; wig short, lappets very short. Inscription in vertical lines down tunic and legs, *shat' Asâr Haruâ*, &c., part of Chapter VI. of the Ritual.

3. Two of red pottery, one with very heavy features, the other coloured yellow.

Also ten specimens bluish porcelain, wig markings &c. black, collar, straight lappets. Two specimens have the tunic projecting in front. In these the wig is short, the implements are more like curved clubs, and the basket is absent. The deceased is named Râmsesnekht.

5. Two slender specimens. A hieratic inscription is written on the back of one in two lines.

From 21, a tomb in which the sarcophagi were

built up of red tiles, were taken two scarabs indicating the twentieth dynasty, and two ushabti of curious form. They are of red pottery. The clay lump has not been shaved off at the heads, nor has the foot been turned. Lappets straight. To one have been added two arms raising the tunic in front.

These are the larger specimens of early ushabti in the collection. But there are besides a number of small ones which have many peculiarities. They are all made of porcelain.

(A tomb at Zuwelên furnished about fifty small ushabti of a female musician of Amen *gemât n Amen* named Ankhsnâst, $2\frac{3}{4}$ inches long. They are of a greyish colour, the markings black, holding two hoes. The back is cut flat, with painted inscription upon it from head to foot (twentieth to twenty-fifth dynasty?).

Ushabti of priestesses are not uncommon in the early period.)

Tomb 27, Nebêsheh, with alabaster, pottery, and porcelain vessels, and an alabaster eye, six specimens, $2\frac{1}{2}$ inches long, very slender, roughly modelled and ridged at the back, markings and illegible inscriptions black, ground colour pale blue (twentieth to twenty-fifth dynasty).

From Nebêsheh also are the following, but their exact *provenance* is not known.

Three specimens of a pale greenish-blue. They appear to have been pressed into a mould on a piece of linen to facilitate their removal from the mould. They are very rough. The back has been cut flat, leaving projections at the hips and the bottom of the wig. The arms project. A fillet round the head, tools and basket are daubed in black $2\frac{1}{2}$ inches.

Another, of much finer work, has been similarly shaved at the back and painted.

Another, well modelled, is of pale-greenish porcelain, elbows prominent, figure that of a female, feet lost. Probable height $2\frac{1}{2}$ inches.

Amongst the small specimens, most of which seem to belong to a transition period, are many

examples in which characteristics of the early and late types are combined.

About 200 specimens were brought together of a broad flat shape, elbows and shoulders very prominent, the wig curved somewhat like that of Hathor, cream colour with a tinge of chocolate, the wig chocolate, back almost flat, tools scarcely indicated, *bearded*. $2-2\frac{1}{16}$ inches.

One specimen green (not Saite) porcelain, wig black, rough work, *beard*, *square pedestal and back support*. $1\frac{1}{2}$ inches long.

One specimen, featureless, cylindrical like an irregular column, but has indication of a square base and back support. $2\frac{1}{4}$ inches.

One rough, very stumpy below the arms, *back cut flat*, bearded, pale green porcelain, lines of wig impressed. 2 inches.

These two last are probably degradations of the Saite type.

A more interesting specimen from Nebêsheh is of red earthenware (black inside) impressed in a double mould. It has been shaved at the side where the two halves of the mould joined. The face projects very little, the ears are distinct, the wig as usual. No arms or hands are visible, but the implements are indicated, and the basket in the form of the sign *Neb* is slung over the shoulder. There is a very doubtful trace of a beard. The elbows do not project, and the whole figure is smooth, as if well bandaged. The inscription is impressed, *t'et ân Asâr hm ntr prâ . . .* "says the prophet Phrâ . . ." The lower portion of the figure is unfortunately lost. $3\frac{1}{2}$ inches (?).

32. Returning now to the larger monuments, no cartouche occurs of any king between Rameses III. and Amasis II. The name of the latter is found on the plaques of the foundation deposits in the smaller temple,¹ and on two fragments of limestone.

¹ In this connection it is interesting to note that a small clay seal is preserved at Bulaq of Amasis II., "beloved of Uat lady of Âmt." Salle du Centre, Vitrine P. No. 3937 (see pl. li.). The monuments of Sais show that at this period Uat of Âmt had a chapel dedicated to her worship in the Egyptian capital.

One of these is carefully cut, and the sign *mer*, beloved, remains, but the god's name is broken away; the other is a rough piece with the cartouches of the king cut upon it, and portions of the name of Uat and Khem remaining. The former name is beneath the prenomen, the latter beneath the personal name.

In the hieroglyphic lists and the papyri, Uat' is always mentioned as the goddess of *Âmt*, but on the Ptolemaic tablets from *Ŝân* there is a triad consisting of Khem (called *Hor her âb set hâû*), Horus *sam tauî*, and Uat, the latter pair being closely connected together.

We now see that two members of this triad date back at least as far as the reign of Amasis. There is no appearance of a third name having been inscribed on the block.

When the temple of Amasis was being excavated, several red granite blocks were found between the vestibule and the shrine, with scraps of hieroglyphs and sculpture on one face. These blocks had been much scaled by decomposition of the stone. The inscriptions had been very lightly engraved, and parts had been cut out. Squeezes were taken of them as each was found, before they were passed and covered up by the advancing lines of trench and rubbish. It was not until the squeezes were compared together in England that any idea could be formed about them. By good luck these blocks, the only granite blocks that occurred in the small temple besides those that obviously belonged to the shrine and lay around it, make up the greater part of a large stele (pl. ix. 4).

In the upper part in two compartments the vultures of the north and south shadowed with their wings a royal name and titles which are unfortunately no longer legible, having been erased. Below this two more compartments, edged on either side with a line of symbols of life and stability, contain figures of Khem back to back before the standard of the same king. Behind the god are traces of the usual altar or stand. Below these again are the king's titles. He is "beloved of Horus, *her tep χas-χet*."

The royal titles have been almost entirely erased, but there is an important remnant of the standard which begins with S. The same letter is the first in the standard on the side of the great shrine, the inscription upon which has likewise been erased. No. 3.

For many reasons I at first supposed the stele and the shrine to belong to the period of the middle kingdom, but it is clear that they were placed here by Amasis. Nearly the whole of the standard name of the king, *smen maât*, can be traced on the side of the great shrine; and the material, the fine shallow cutting and polish, and the erasures are sufficient to show that the stele was made and defaced at the same time as the other monument.

To dispose at once of the shrine, the only hieroglyph that has been left untouched when few signs can be even traced elsewhere, is an eye following the cartouche. To suppose it to be the first letter of the formula of dedication, *ar-nef m mennuf*, &c., seems insufficient: it should be part of the name of Osiris. The dedication must have been to Uat, but Amasis may have styled himself beloved of Osiris, *her âb set hâû*, or *merîti her âb Âmt*, or even as in early dedications *Neb Tattu*.

There are two instances in the British Museum Gallery that I have noticed of erasures of the name of Amasis: No. 134, statue of Henaat, whose great or good name was *Râkhnemab men*: the basalt has resisted the evident attempt at erasure; and No. 94, which is not so clear an instance, as much of the inscription has been battered. These monuments are undoubtedly from Sais.

If at Sais itself the cartouche of Amasis is found to be defaced on a statue placed in the tomb-chapel of a functionary (for his sarcophagus also is in the British Museum), we need not be surprised if the people of *Âmt*, terrified by the approach of the victorious army of Cambyses from Pelusium, hastened to own themselves vanquished, and to show their zeal in the cause of the conqueror by chiselling out the name of the king

who had offended him from the temple monuments, with the whole of the dedication of the shrine.

Returning to the stele, it can scarcely have been built up of separate blocks, but must have been cut up in order to be reused. Perhaps the Sebennyte kings required the granite of the defaced stele for some alterations above ground, in which the foundations of Amasis were not disturbed. The basalt statuette (pl. x. 11) found in the temple seems to show that it was not entirely abandoned after the Persian invasion.

The god *Hor hr tep χasχet* of the stele is found on two monuments at San, on the pyramidion of an early obelisk re-cut by Rameses II. (Tanis, I., pl. x., No. 55), and on the original part of an altered obelisk of the middle empire (pl. ii., 13, and p. 7).

This latter is remarkable for the two hawks, crowned with the lower crown, which support the king's cartouche on the pyramidion. Beneath this is a scene of a king offering to a hawk-headed god who is connected with the representation of Khem by the double straight feathers on his head. The king is "beloved of Horus *neb χasχet*." Probably the hawk wearing the lower crown is a symbol of this god as well. But on the Saite monument we see that Horus *her tep χasχet* has assumed the full Khem form, and even bears the god's name upon his head. This reminds us of the Khem *hor-ūr* of Coptus, a city which lay at the Nile end of another desert route, and the god of Panopolis was a form of Horus. Very probably Horus of the desert is identical with Khem, who takes the first place in the Ptolemaic triad of Am, and the second place on the block of Amasis, and is there called *Hor her āb set hūū*.

The word *χasχet* is considered by Brugsch to mean "foreigners," in which case Horus, at the head of the foreigners, would be the god of the Phœnicians and Greeks settled in the district; and non-Egyptians must have been in this borderland as early as the twelfth dynasty. But it is, perhaps, possible to take it in its original sense of

"undulating desert," as opposed to *tau*, alluvial plains of the Nile valley, delta, etc. *Heq χasχet*, a title occurring both in the earliest and the latest periods, may be the equivalent of Hyksos. *Heq* is used most commonly, if not exclusively, with names of places, not of peoples.

It would seem that the desert, or half desert, portion of the nome was called *Set* or *Xas hāā*, "desert of exultation," over a town of which name Osiris mertu presided as well as Khem (sarcophagus of Nekhtnebf at Berlin), while the inundated portion was the *Seχet hāā*, "field of exultation," celebrated for the abundance of its canals and herbage (cf. Brugsch, *Dict. Geog.*, 482).

The triad then seems to combine the *desert* god Khem with the goddess Uat of the marshes, and her nursling, the young Horus, destined to unite the lands of upper and lower Egypt. This Horus *sam tau* is crowned on the Ptolemaic monuments with the double crown. The prince in the nome sign probably has no mythological reference, and the crown which he wears varies only to indicate the relative position of the two halves of the province of Am which formed the nomes of Bubastis and of the Eastern Buto or city of Uat. I purchased in Alexandria a bronze figure of the young Horus with the lower crown only, in the act of walking. This form, however, refers to the division of Egypt between Horus and Set, in which Lower Egypt fell to Horus.

33. In addition to these monuments from the temple, several inscribed sarcophagi were found in the cemetery. The fine basalt sarcophagus of Psemthek, son of Pathenf and Nais-sharu (pl. xii. 18), servant of the crown of Lower Egypt (worn by Uat), *Āmt*, or "high priest," and "secretary of the city of Āmt the friend loving his master," was found with two other inferior ones of limestone (pl. xii. 19 and 20) of Psemthek menkh āb, son of Āst khebt, and of Psemthek, son of Uat emhāt. The inscriptions upon these latter are cut in one line round the edge of each, starting at the centre of the head and running

both ways. The limestone has not been smoothed for the inscription, and the cuts have been filled with lime deposit, making it impossible to take a squeeze, and difficult to copy. The titles are nearly the same on the three sarcophagi. The religious texts are made up of sentences that are found in the pyramids, and the use of which was revived under the twenty-sixth dynasty. They compare the deceased to Osiris, rescued by his son Horus, and eventually seated among the gods. The translation of the inscription upon the basalt lid is as follows: "(says . . . to the Osirian) the servant of the lower crown the Amt, the secretary of the nome? of Amt, Psemthek whose mother is Nais-sharu, Thou art perfected by the eye of Horus namely the lower crown: great are thy spirits many are thy colours. It (the crown) rescues thee as it rescued (its) Horus. It places thy spirits O Osirian Psemthek at the head of the gods with the uræus on thy forehead. Rise thou Osiris Psemthek, it leads thee to thy mother Nut while she takes thine arm. Be not dispirited be not cast down be not Horus places thy intelligence at the head of all intelligences, thy power at the head of all living, O Osiris servant of the lower crown. Amt, secretary of the nome-capital, friend loving his master, Psemthek whose father is Pathenf." In the lines at the side Amseth, (Hapi), Tuantmetf (and Kebhsenuf) say "I come to protect thee, Osirian Psemthek son of Pathenf."

In the rubbish of this tomb were found two ushabti, unfortunately much damaged. They are of a son of a servant of the lower crown (pl. xii. 21 and 23), and probably would have given the genealogy on the father's side of some of the tenants.

The name of Psemthek menkh ab points to the time of Psammetichus II.

In tomb 42 was a limestone sarcophagus with an inscription in one line down the middle of the lid, containing an address to "Osiris meriti, in the midst of Amt," for the commander of infantry Peduamen, son of Psemthek merptah, and of the

lady Teduasir (pl. xii. 21). The chapel of Osiris meriti may be marked by the adjacent building with foundation deposits.

In the temple was found the burnt fragment of a limestone statuette (pl. x. 12) of a priest (?) of Uat of Amt, chief of the singers of the king's house Se hotep . . .

The two basalt statuettes (pl. x. 11 and 13) belong, perhaps, to the Sebennyte and Ptolemaic periods. 11 was found in the temple, and is the back support of a figure of fine work. The inscription upon it is in two vertical lines. Several of the signs which cross the lines are to be read with both. 13 is from the back support, and 13A from the side of the advanced left leg of a fragmentary male figure brought from the village.

34. The ushabti of this late period were very numerous. In general no colour was used, and the moulding is therefore much deeper, sharper, and more careful than in the former period. Several types may be distinguished. Probably the earliest are those with legs flat, broad, and curveless; the latest, those in which the swell of the calves and of the chest is exaggerated. The former type only occurs in small specimens. The implements are usually a "fas," a hoe, and a basket.

There were frequently several interments in the same tomb-chamber, two earthenware coffins or stone sarcophagi, or an earthenware coffin and a sarcophagus being often found together. And more than one type of ushabti is also often found in a tomb. The figures were generally scattered and broken, lying in the rubbish of the tomb; but in 46 and 39 the boxes lying against the wall of the tomb had escaped the general ruin, and although the wood had decayed away, the figures were found standing in a rectangular group as they had stood in the box thirty or forty together. From one tomb, No. 46, over 250 were taken of one type, in several lots, all uninscribed. These figures often vary in size in the same tomb, while the same type of features is preserved. The most remarkable specimen from Nebesheh is

from tomb 20. It is of the true Saite form, but the inscription is not only impressed, but filled with dark colour, which in some of the specimens is almost hidden by the thick coat of bluish-green glaze. The name is difficult to read, but seems to be *Ās(?)āmes*, a commander of troops, son of *Teduāsār*. In the same tomb were several small specimens with the name of *Seni (?)*, four inches high, coarse work. *Āsāmes*, which is of the larger size, $6\frac{1}{4}$ inches, is very flat-chested, the shoulders low and square from the neck, the elbows rather prominent. *Seni*, though of small size, has no mark of a particularly early date, the swell of the calves being clear, and is probably later than *Āsāmes*.

Some of the early type, with straight legs, four inches high, were found in tomb 45 with three small peg-bottomed pots of rough red earthenware, $2\frac{1}{4}$ inches high. (*e*) in the plate is of this type.

The ushabti of "the chief of the singers, the priest *Har ut'a* son of *Uat m hāt*," tomb 40, is perfect for material and workmanship. The contour of the slender mummified body is harmoniously curved, while the angular details are sharply cut. This may be taken as typical of the Saite style. The specimens measure seven inches: with them were found some well-worked figures only $2\frac{1}{4}$ inches high, more stumpy.

Of the later style are a number of figures brought in together, one of which is inscribed *Ĥer hā ar neb*, or *Hor kheb ar neb (?)*. (*f*), a specimen of the same type, in the British Museum, bears the name of *T'ether*, thus affording an indication of date.

As to the inscriptions upon them, we find one "*erpā hā*" (tomb 39); eight "commanders of troops" (tomb 39; 50 A. "*Ĥor*, son of *Khabes*"), 12 ("*Ĥor m heb*, son of *Ment?*"), 11 ("*Pa ĥor pesh?* son of *Tefnut*"); and of the general collection, perhaps *g* (but the inscriptions on the numerous ushabti of this person are all blundered and no two are alike), and *i* ("commander of troops(?) . . . son of *Teduāmen*"), also *k*, and *l* ("*Peduāsār* son of . . .").

Other names are 50 B "*Hun*," c "*Ā her un nub* son of *Ta du āst*," e, "*T'ed nub*," h "*Peduchonsu*," j "*Ast?*" son of "*Ta ĥetr*," and the two more interesting ones, d "commander of ? troops of *Khent ābt* (fourteenth nome), "*Pef (ā) chonsu* son of the mistress of the house ? . . ." very much blundered (this was brought from the excavations in the town: probably it was a keepsake when the family of "*Pef ā chonsu*" removed to the nineteenth nome); and B, governor of the great house "*Pef ā (?) net* deceased, (son of) the *seḫem hau* of *Sais?* *Sebek* (or *Se sebek*) and of . . ."

There are no Greek or Latin inscriptions and it is difficult to find any classical name to correspond with *Nebêsheh*. Perhaps it is the Arabian *Buto* of *Herodotus* II., 75.

CHAPTER VI.

GEMAIYEMI.

By F. LL. GRIFFITH.

35. On the right bank of the canal which connects *Ŝân* with *Fâqûs*, and three and a half miles north-west of the hamlet of *Nebêsheh*, rises the small high mound of *Gemaiyemi*. It stands a conspicuous landmark on the brown, barren, salt-encrusted plain that stretches northward from *Nebêsheh* almost without a break. From the temple enclosure of *Āmt* it is visible as a high, reddish-coloured hill, due south of the distant mountain-like heaps of *Tanis*. As one walks over these hot, level plains, the sense of size is almost lost. Against the horizon rise mounds on all sides, while a succession of hill barriers appears to block the way. Yet when these mounds are reached they prove to be mere heaps of dust collected round the desert thorn-bushes—the long barriers are little more than a succession of such heaps run together into banks. From *Gemaiyemi* the landmarks are, on the south, the mound and sand ridge of *Tel Far'un* with a collection of Arab huts, called *'Ezbet Beshâre*, on its northern edge, and the ruins of *Āmt* on the

west. Beyond rises the sand gezeirah of Menâgi, crowned by the buildings and huge tent of the sheikh of the Hanâdi Arabs. Northward lie the twin cemeteries of Zuwelên, now as completely ravaged as that of Nebêsheh. Far beyond these is Sâh. South-west along the canal lies the sand mound, and a few palm-trees of the Gezîret Abu Qêh marking the landing-place from the Bahr Fâqûs, while, though scarcely visible, the mound of Khata'neh is but seven miles distant.

The mound of Gemaiyemi consists of the remains of crude brick houses, dating from Roman, Ptolemaic, and perhaps earlier times. Arab remains are absent. Round it, on the north, are the walls of isolated buildings almost washed away by the rush of water¹ from the higher part during the winter rains. Eastward a few insignificant tombs have been found, with earthenware coffins. At the south-east corner, however, is a place of more promise,—a space of about three acres with limestone chips on the surface, enclosed by a brick wall. About 200 yards from the southern extremity of the mound is another smaller enclosure. This latter I tested in several places, but found nothing. It had doubtless been for defence, but contained no building of importance. Denudation had carried away the wall almost to the foundation, and inside the enclosure nothing remained but a foot or so of dirty sand, with scanty chips of pottery. From the bricks it appeared to be Ptolemaic, but I could obtain no exact measurement of them.

36. The other enclosure, however, is of greater interest (see Pl. xxi.).² The sides of the rectangle

¹ Water action was visible everywhere where there was a slope. The water does not generally run in deep channels, but washes over the surface of the lower slopes, wearing them down nearly evenly year by year. Much of the loose and crumbling material must be carried away by the high winds.

² I have to thank Mr. Petrie for the plan of this enclosure, and for many valuable suggestions with regard to the antiquities obtained there.

were duly oriented, and measured about 420 ft. from east to west, by 310 ft. north to south. The entrance was in the centre of the west side, 25 ft. wide. The massive enclosure wall on the outer edge was generally levelled by denudation to the last brick, sometimes even that being washed away. It was of variable thickness 24—28 ft., and built of bricks $9\frac{1}{4} \times 18\frac{1}{2}$ ins. on all but the east side. These bricks were laid at right angles to the direction of the walls, many of the courses at the base being inclined breadthwise at an angle of about 45° . The wall was lined inside with one or two thicknesses of bricks laid parallel to its direction. The whole of the east wall and the two side walls for about 70 ft. of their length from the east were built of smaller bricks, 8×16 in. The gateway was lined with bricks $7 \times 13\frac{7}{10}$ in.; two low walls connecting its sides were of similar bricks, and made a complete enclosure or chamber, which was filled with sand, and had foundation deposits at the corners as at Naucratis in the gateway-building of the great temenos. On reference to the plan (pl. xxi.) it will be seen that a few courses of brick wall were traceable a few feet south of the centre, running east and west to within a short distance of the east and west walls. If there ever existed a corresponding one on the north, it has completely disappeared. A quantity of limestone blocks and chips shows that these walls were part of the substructures of a stone gateway, and were intended to hold in the sand beneath the stones. This late Ptolemaic gateway opened opposite the extreme south end of the mound, and also in the direction of the present canal. It is quite possible, however, that in earlier times the gateway was on the east side towards a canal which must have run beside Amt, and probably between Nebêsheh and Gemaiyemi. As I have pointed out, the east wall is all of Ptolemaic date, of the same period as the earlier buildings in the mound itself, and may therefore replace an earlier entrance. Within the enclosure was a large building, apparently a temple or chapel, on the east of

the middle. Besides this, along the south wall were numerous small brick chambers, bricks 8×16 , in places projecting far into the enclosure. A block of chambers of 15 in. brick was built on to the west wall on each side of the entrance. Here and there traces remained of extensive buildings at a higher level, which had been destroyed by denudation. In several places were circular, semi-circular, or square constructions of the smaller brick, like shallow wells, that were perhaps intended for storing corn. They were placed either singly in the sand or in groups of two or three against the chamber walls. They descended to about the level of the foundations of the walls, and were filled with dark earth or sand.

The remains of the principal building consisted simply of the four brick walls of the foundation, descending about 6 ft. into white sand, with a thickness in parts of 18 in. of limestone rubbish and dust covering the sand in the enclosed space. The bricks measured $8\frac{1}{2} \times 17$ in.; length of the sides from north to south 70 ft., east to west 110 ft., the thickness of the wall being 6 ft. In the north-west, south-east, and south-west corners, and in the centre, were foundation deposits, between four and five feet above the base of the wall. As in the temple of Amasis at Nebesheh, there was no deposit in the north-east corner. The whole of the ground enclosed by these walls was dug out to the depth of the foundation deposits, and many objects were found with their bases at about the same level, i.e. within the first 18 in. of sand. Two pits had also been sunk in it in Ptolemaic and Roman times, and filled with pottery and rubbish. The positions of the principal objects found are marked upon the plan. A find that occurred in the first few hours, and made me stay and work out the place thoroughly, was made as follows.

37. One of my men digging a shallow trench through surface rubbish and into the sand to test the place, at a point where a quantity of fragments

of coloured glass lay among the chips, came upon a large bronze socket. In a few moments two more sockets were found beside it at the very top of the sand. Digging deeper, he found immediately beneath them two gilt bronze figures of a king in adoration; and from the number of fine pieces of glass that were scratched out of the clean sand, and not from the layer of chips, with the next stroke it became evident that we were on delicate ground. Scraping away some of the sand with my fingers, I laid bare a piece of mosaic *in situ*. I therefore stopped the work at that point, and hastily fetching a tent from Nebêsheh, established a camp of labourers on the spot. It was not until several days had passed, and I had made out something of the nature and plan of the buildings, and had determined how to rescue some of the mosaic, that we proceeded with this delicate job. I scraped away more sand, and laid bare, and took off bit by bit, a small panel of glass mosaic representing a flying hawk of blue glass in an upper compartment, taking up nearly one-half of the panel. Beneath the hawk were four horizontal lines of different colours. Beneath these lines were uprights something like the sign $\bar{a}a$ or χa , of pale greenish-blue, alternating with rectangular plaques of lapis blue. Below this came a row of baskets *neb*, and another horizontal line. After this the mosaic was much disturbed, but the hieroglyph $\bar{a}a$ was near the edge, and a piece of minute bordering. A bronze rod stretched along the whole length of the mosaic, which was lying on its side and in an almost perpendicular position. It had been inlaid on a panel of wood. The wood having entirely decayed away and left gaps between each minute piece of the mosaic and its neighbours, and no backing, it was difficult to save any of the design in the loose sand; only a small portion could be exposed at a time. Pasted brown paper applied to the sand face took off the mosaic very fairly, but when it was left to dry the paper bent up and broke the larger pieces. To complete the disaster, the plaster of Paris sent down from Cairo, to which I

transferred it, was so bad that it broke into many pieces on the voyage home. Of course, the climate of Upper Egypt would have preserved the whole *cache* just as it was deposited.

This find consisted of—(1) Four bronze rods of square section $\frac{5}{16}$ ths of an inch thick, two measuring $32\frac{1}{2}$ inches, and two 35 and $35\frac{1}{2}$. These had been partially gilt and cased with rings. A blue porcelain ring $1\frac{3}{8}$ inches long and of the same diameter remains cemented on to one rod of each size. When I found them there were adhering to them similar thick rings of some substance, probably glass, which I found also amongst the plaques of the foundation deposits, decomposed into a crumbling translucent yellow mass. The rings were spaced as if a third kind, perhaps of wood, had alternated with them. There were also traces of gilding in places on the rods, but they seemed to have been entirely cased with rings. Three of these rods were found together, the fourth lay parallel to them at 2 or 3 inches distance.

(2) The mosaic, which lay in two planes sloping down at right angles to each other and meeting at the bundle of rods, extended the whole length of the rods.

Of one panel very little remained, and it seemed to have been left unfinished. The other I have already described. Traces of wood were found where the panels met the bronze rods. The height of the panels may have been 18 inches, but the upper part had been destroyed.

(3) The bronze sockets were 6 inches high and $3\frac{5}{8}$ square. They were intended to support some framework, and were furnished with square stave-holes $3\frac{1}{2}$ inches wide, in order that it might be carried like a sedan chair. The socket itself is 2 inches deep and about $3\frac{1}{2}$ square. Cement remains in it as well as nails, which were driven through uprights rising 2 inches above the sides. The wood was therefore in the sockets when they were buried. They were evidently deposited in a linen or canvas wrapping. The two gilt bronze figures were $4\frac{1}{2}$ inches high, kneeling with hands stretched out in adoration. Several

small hooks, holdfasts, and nails of bronze were also found.

Perhaps all these belonged to the same unfinished work of art. On the surface amongst the limestone rubbish a quantity of fragments of glass from similar mosaics were found, having probably been thrown out when the rubbish pits were dug. I found several moulds for hieroglyphs, &c., in limestone and terra-cotta in rubbish amongst the chambers on the S. side.

38. The following is a list of the principal objects found.

In the large building: foundation deposits (see Pl. xix). These were found in the N.W., S.E., and S.W. corners, and in the centre. There was no deposit in the undisturbed N.E. corner. They were buried about 18 inches deep in the clean sand, and 4 or 5 feet above the base of the wall. The centre of each corner deposit was about 30 inches from each wall. The objects were arranged close together and upright in a rough oval which pointed to the corner and measured about 16×18 inches. They included eight platters, one being of large size, three plain pots, one or two long jars, and one or two short ribbed ones, in all fourteen in each case. These were all of rough red ware. There was also a limestone mortar in each deposit, towards the corner. This arrangement differed in its details in the three deposits, and it is probable that some objects were overlooked.

In the N.W. corner was found a corn-rubber, a model bronze *fas* with a socket in a platter N. of the mortar, a chisel in that to the S. The following plaques were found under the rim of a large platter in the centre: red (now dark green) glass, bronze, alabaster, lead? tin?; and a spear-shaped model trowel.

In the S.E., a pair of corn-rubbers, and plaques of gold, bronze, and light-blue glass.

In the S.W., plaques of alabaster, red glass (dark green), and yellow decomposed glass; model chisel and socketed *fas*.

The central deposit consisted merely of six (or seven?) platters. A corner of it with one or two platters was cut away before it was observed, but the rest was dug out with great care.

Other finds were (in order from W.) (1) A large bowl of trachyte, with three feet.

(2) Three bronze pans nested together. Two of them are small and of equal size, $4\frac{3}{4}$ inches in diameter. The third is much larger, 8 inches in diameter, and has a socket inside near the edge, and a chain fixed opposite to it, also on the edge (pl. xx. 2). It seems to be a lamp reflector. But what kind of lamp was to be used with it I cannot say. No such thing is known from Egypt. The others seem to be a pair of scale pans, not yet pierced for suspension.

(3) A large and finely worked figure in steatite, 16 inches high, and in perfect condition except for a slight injury to the nose. It represented Isis crowned with the disk and horns, and seated on the ground in the attitude of Māt, i.e. with the knees bent up. Now at Bulaq.

(4) Beyond these, in a pit filled with late rubbish and pottery, two slabs of limestone were found, marked I. and III. near the centre.

(5) A heap of figures of gods moulded in plaster. Some were of parts only, showing that they must have been for use as models. The following is a list of them: (i.) Osiris, complete figure with headdress, on throne, beardless, 30 inches high. (ii.) Osiris with headdress, and beard, upper part down to waist, 15 inches. (iii.) The same without beard. (iv.) Isis, complete figure on throne without headdress, 19 inches. (v.) Horus as child, complete figure seated as in the arms of Isis, but without arms, headdress, or lock of hair, $14\frac{1}{2}$ inches. (vi.) The same much broken. (vii.) The same, front only, 13 inches. (viii.) The same, back only to knees, 10 inches. (ix.) Same as last, $8\frac{1}{2}$ inches. (x.) Khem, head and neck on stand with ring of crown, but no feathers; the head is $2\frac{3}{4}$ inches high. (xi.) The same, left arm, 6 inches from shoulder to elbow. (xii.) Head and neck on stand. (xiii.) Back of a

large head, 7 inches high. (xiv. and xv.) Cylindrical pieces. These are all in coarse and crumbling plaster.

From some other part of the enclosure come the fore legs broken from a small sphinx, in a harder plaster.

(6) An immense jar with wide mouth, sawn in two across the middle. The base was about at the level of the bottom of the wall. It was the deepest object found. Traces of two wooden staves, painted green, and decorated with glass mosaics, were found projecting from it to the surface. The jar must have been used as a bin, for corn(?).

(7) Two pieces of limestone sculptured on both sides. They were evidently pieces of trial work. Also from the sand were taken a bead of black glass with eyes of yellow and black, and a bronze plume-holder pierced with holes for sewing on to a leather cap or helmet(?).

On the N. side were many bronze figures of a late period on the surface amongst the limestone rubbish; two are of base Greek style, a head and a figure of Harpocrates. There were also two specimens of Isis and Horus, four of Osiris, head of Thoth, a large uræus with disk, small cat, and Anubis; and similarly on the whole of the E. side up to the middle of the chamber were innumerable pieces of glass from mosaic work, together with fragments of porcelain figures, rings for bronze rods, and other ornaments: amongst these was part of a very fine winged scarab for inlaying. Some of these objects must have been thrown out when the Roman pits were dug in the sand, or left on the surface as the sand was drifted away by the wind.

In other parts of the enclosure many objects were found. At the N.E. corner, apparently under the wall (if the very detailed statement made to me was correct), which had been almost washed away, were found four small door hinges, two upper and two lower, of massive cast bronze for a pair of doors, two portions of a bronze framework representing the hind quarters of a

lion, hollowed for the insertion of the wood with cement in the sockets, by means of which the wood was fastened in; a fine bronze Ptah, probably from the shrine to which the door hinges belonged, a gilt steatite Osiris (apparently later than the rest), two bell-shaped bronze objects, perhaps capitals of pillars of the shrine or else stands, and two right-angled pieces of bronze not pierced for nails, and therefore only ornamental. They were probably from the sides of the staircase of Ptah (pl. xx. 3, 4).

At the gateway the foundation deposits in three corners consisted of a small limestone mortar; a pair of corn-rubbers, the upper one with distinct handles, modelled in limestone; and two plaques of green porcelain. The N.W. corner was destroyed and the deposit lost (pl. xix.).

Pieces of bronze slag were found in several parts of the enclosure, and a small bronze oinochoe in a chamber near the W. wall. This had been burnt; a lump of lead at the bottom had apparently been put in to steady it. Of iron there were found a knife, a nail, a chisel, and the tip of a broad hoe (?) made of two plates sloping together to an edge. The edge measures 7 inches in breadth, and the sheath is $2\frac{1}{2}$ inches high. This was found in a chamber on the south. A few bronze arrow-heads were also found, and many cylinders of blue porcelain to be fitted to bronze rods, a mould in hard limestone for a skeleton eye (*utá*), and disks of porcelain pierced with three or four small holes, or, like buttons, with pierced cross bars at the back.

39. The remains of glass-working are of considerable interest (see pl. xviii.). They consist of moulds in limestone and terra-cotta found in a chamber between the central building and the S. enclosure wall; pieces of waste glass, &c., from various places; and portions of mosaic including the fragments of the hawk mosaic, and pieces intended for similar designs picked out of the sand in the temple area. Many pieces were found above the sand in the rubbish, with

which they had become mixed by later disturbances of the sand, and by its gradually drifting away.

The pieces of glass are of many forms. The larger figures are usually made in several pieces. There are also hieroglyphs, each one generally complete; a few pieces of background moulded to fit the figures, and many pieces of border ornament and patterns. Some are flat, others in relief. The surface is nearly always shiny. The colours are various: deep blue imitating lapis lazuli (in which material there were two specimens of the hieroglyphs *re* (the mouth) amongst the glass), pale blue, green, yellow or orange red, brown (?), dark green or sealing-wax red, and black. The colours vary slightly in tinge and intensity, and change entirely by decomposition. The deep blue is often clouded with white or grey-white, no doubt intentionally to imitate the pale crystals in lapis lazuli. The pale blue has often decomposed white. So has a red imitation of jasper (?). A sealing-wax red decomposes dark green. Another pale green turns brownish.

Different colours in the same piece were obtained (1) by simple inlaying in hollowed pieces, probably when heated and without cement. There are several pieces of large star and other patterns of this kind, without the inlay, and feathers, &c., of two or three colours. Or (2) by mixing colours in lumps, as in one piece of imitation marble (red, white, and green). Or (3) by laying rods of different colours side by side to form a pattern, fusing them, and reducing them to the required thickness by drawing them out in one rod, which was then cut into sections. The finest work was done in this way, as by careful manipulation a pattern on a large scale could be reduced to any degree of fineness, the bar remaining of the same quality throughout. Several bars were found, all of square or rectangular section. Clear evidence of the manner in which the bar was formed is found in a piece where one of the three bars that formed a rectangular pattern has slipped from the pliers and been left in the rear. In this example three

square bars of star pattern have been joined and drawn out again. Other pieces have been drawn out of unequal thickness, and the bars generally have a thickening at the end. In one case a saw-cut is visible where a section has been nearly sawn to the centre from each side.

Flower and star patterns are very numerous done in this way, and there are many pieces of chequer pattern, sometimes of five colours. A bar one-sixth of an inch square contains the figure of a vulture crowned with the double crown. Irregular patterns were squared with blue glass.

The commonest colour is lapis lazuli blue, and next to this the pale blue. To economize the rarer and the mixed colours, very thin slices were cut and mounted on hot plates of dark blue glass, and occasionally of the pale blue.

Some of the bars that were found have been cut up for distribution. The original colours are shown in these sections, all of them being much brighter than on the outside.

The forms found at Gemaiyemi are very numerous (see pl. xviii.). There are portions of male figures kneeling in adoration, the largest being about 4 inches high: these are in red glass turned dark green. They are in relief, and made in several pieces. The head and the advanced arm are separate from the body, and the figure is cut off above the waist, apparently for a tunic of different colour to be inserted. There are several wigs and beards of lapis blue in relief, probably from these figures, and a large wig of a dull slaty blue.

There are also robes from the figures of women, of red or bluish glass, flat and streaked, the curving folds of the garments being indicated by manipulation of the rods in drawing out the piece, which is clearly composite.

There is the leg of a large standing figure in red glass relief, and portions of a smaller one, and an arm seems to be in the act of holding a prisoner by the hair. In relief also is a well-worked tie from a girdle, and a hand in green glass. A calf's head and a fist are worked all round.

The mosaic hawk is flying, and measures 8 inches across the wings, and probably was 8 inches in length. It is all of glass in relief. Each feather is a separate piece. The five long feathers of the tail are of green glass tipped with brown. The small feathers of the back and neck and upper edges of the wings are represented by numerous hexagons of blue glass. The long feathers down the middle of the wing are green, those on the inner edge blue. These wing feathers are all graduated, and those that overlap the back of the bird are tipped with brown.

The head is lost from the mosaic, but several upper mandibles are preserved of blue glass in relief, and of different sizes. A blue glass shank of a bird's leg probably held the signet-ring. There are also eyes hollowed to receive the pupils.

Of hieroglyphs, part of the bolt which forms the name of Khem is very large, and must have been borne above the head of a figure of the god.

The following are some of the smaller signs, which are of various sizes and colours, turning in either direction, and either flat or in relief.

| | |
|---|---|
| Woman seated, wig separate. | Bird <i>pa</i> ? head and wings separate, the eye inlaid, and a spot on the cheek inlaid with flower pattern. |
| Separate heads of deities, &c.; one is hawk-headed. | Hawk. |
| Child <i>se</i> . | Owl. |
| Arm <i>remen</i> , <i>ā</i> and <i>next</i> . | Owl and arm <i>mā</i> . |
| Mouth (lapis and red glass). | Ibis on stand. |
| Leg <i>b</i> . | Vulture <i>met</i> . |
| Hand <i>t</i> . | &c., &c. |
| Animal, ram or ox. | |
| Lion. | |

Amongst the purely ornamental pieces are flat oblong plaques, pieces like small stelæ with curved tops, but themselves curving out as if for cornice decoration (amongst them are several sloping corner pieces), bars or narrow lines of different colours, pieces like fore legs of animals, and like the disk on the horizon (this turned sideways is part of the decoration in front of the hawk).

Pieces of background are very scarce, but several forms occur that cannot be attributed to anything else.

The glass was shaped by being run into moulds. For the hieroglyphs and elaborate forms earthen-

were moulds were used. In this material there are moulds for the hawk's beak, for hieroglyphs, sacred eyes, and a Bes head. They are cut with the sides sloping in, so that the moulded pieces are narrower at the back than in front. The same is the case with the limestone moulds which seem to have been used here exclusively for the large and simple forms, bars, &c.

A few words must be said as to how they were put together into patterns. The glass varies in thickness from $\frac{1}{2}$ to $\frac{1}{32}$ of an inch, and pieces of different thickness were used together. The panel of the hawk mosaic seems to have been covered with the thinnest possible layer of gilt stucco, and wherever there was no glass, even between the feathers, the gilding appeared.

Sometimes a piece of backing was inserted behind the glass, and in one place a large triangle of slaty stone had been put at the back of a group of pieces to raise them, and cemented on to the wood with yellow paste. The work does not seem to have been *cloisonné* in the wood. Probably the panel was grooved and channelled where required, and then filled in with glass, gilt stucco, and cement, like the wings of the wooden Isis in the Museum of Practical Geology.

Amongst the glass pieces are numerous fragments of the outlines of cartouches. These are unfortunately in every case made separately from the signs enclosed, and there is no certain indication of the king's name amongst the hieroglyphs found. These include Su (ten) se rā, &c. The occurrence of *sen* suggests Philadelphus or his son, and the lions might very well occur in Ptolemaic cartouches. The hawk upon the panel was no doubt the hawk of Lower Egypt overshadowing a king's title. An early Ptolemaic date will agree very well with the rest of the remains found in the sand, which included a piece of Greek pottery, a small black and buff bowl of bad glaze, but probably made at the end of the fourth century.

Returning to the buildings in the temenos (see pl. xxi.), the walls of the central chamber are

evidently only retaining walls for the foundations of a stone building, for there is no exit. The sand inside was quite clean, except where the pits had been sunk in it, or wooden objects had decayed. That the building was a temple seems almost proved by the fact that no Egyptian stone building has been found of an early date that is not either a tomb or a temple. On the analogy of similar buildings the space enclosed must have been paved with large blocks of stone over the sand. Yet in this sand were found many objects, some of them of small value and deposited separately. It is clear that the paving-blocks would not have been raised all over the building in order to hide these objects. It is evident, therefore, that with the exception of the foundation deposits, they were placed there after the complete destruction of the building. Appearances are all in favour of this. Some of the objects are unfinished, and parts only of large designs which were hurriedly buried in small lots at some time of panic.

40. The history of Gemaiyemi may now be traced somewhat as follows. There was no building here of which I found any traces, until, about the time of the twenty-first or twenty-second dynasty, a strong enclosure was built. Of this nearly square building three sides of the great wall remain, together with a small detached piece of brickwork buried in the sand between the E. end of the central chamber and the later E. side of the enclosure, near the middle. This is curved, and may be the last trace of a gateway looking E. The wall perhaps enclosed a temple of the same date, which has now entirely vanished. I trenched the whole enclosure thoroughly without finding any other bricks as large as those of the enclosure wall. This massive wall no doubt served to guard the point at which the canal or river branched to Tanis and Nebêsheh. Nothing more can be told of it until during the flourishing Saïte epoch the enclosure was repaired; the E. end, which was then probably in ruins, was carried out further, and the entrance stopped, while

a new gateway was cut through on the W. towards the growing settlement on the N.W. In this rebuilding, if the account of the workmen is to be trusted, the N.E. corner was built over the remains of a shrine, perhaps part of the buried treasures of an early bronze-working community, or even of the old temple. The style of the bronze, which is unusually massive, makes this possible. A temple or chapel was at the same time built, and the enclosure filled with chambers. But this was soon destroyed, perhaps in the first Persian invasion. The enclosure was taken up by artistic workers, who covered the ruins with fresh buildings, now almost entirely washed away. Here they seem to have flourished into the Ptolemaic period, when their trade was suddenly put a stop to by a panic. The artisans buried their unfinished work and some of their less portable stock in trade before taking flight, but never returned to claim them. The village, however, still flourished, and a new camp or enclosure was built on the S. But later the place declined, and before the Arab conquest Gemaiyemi, as well as Nebêsheh, was abandoned.

41. Notes on villages, &c., in the neighbourhood of Nebêsheh.¹

1. Fâqûs (F. Eng.), low mounds on both sides of the railway, now almost levelled by the seabkhîn. In Baedeker's Lower Egypt it is stated that there are inscriptions here, some even of the time of Rameses II. I have not been able to find any of these. Probably those at Qantîr are intended.

2. Gezîret Dêdamûn, a sand-island, so called from the village of Ed Dêdamûn (Fr. Dahdamoun) on its western edge.

3. Hata'ne (Eng. El Khatanah) lies on the west of the extensive though low mound.² I purchased here a small fragmentary group in dark limestone of two persons standing with an inscription between them with an invocation to the king

¹ F. denotes the Atlas Géographique of the Description de l'Égypte; Eng., the War Office Map of the Delta.

² M. Naville has described the results of his excavations here in "Goshen," pp. 21-23.

of Upper and Lower Egypt, Sânkḥqarâ, to grant funeral offerings. The names of the two persons are unfortunately lost, with the heads and feet. The style is that of the eleventh or twelfth dynasty (see pl. xlii.). Sânkḥqarâ, a king of the eleventh dynasty, celebrated for an expedition to Punt undertaken in his reign by an officer named Hennu, is next to Khufu in a doubtful connection on the Šân papyri, and Pepi similarly doubtful on some blocks at Tanis, the earliest king whose name has been found in the Delta. It would appear that he was especially connected with this unknown city. Perhaps he had a temple here. It is worthy of remark that the cartouche on the curious false doorway in the great temple at Šân (Tanis, p. 10, and pl. iv. 28) seems to read *Sehotep âb râ* on the squeeze. If so, in all probability it belonged to a chapel or cenotaph of Amenemhât I. It is probable that this king was regarded as the founder (or second founder) of Tanis, and that he was worshipped here at a tomb, or chapel in the temple, in which his statue was placed, his real tomb being more probably at Thebes or in Middle Egypt. This throws light on the occurrence of King Sânkḥqarâ in the place of a god at Hata'ne. He may have founded the temple afterwards adorned by the kings of the twelfth dynasty, and his memory was kept sacred there. We must recollect, however, that, as the story of Saneha shows, living kings were counted almost as gods at that period.

4. Sema'ne, F. Eng. West of this is a stretch of sand with pottery on the surface and remains of buildings. A large heap of limestone debris mixed with granite lies immediately N.W.

5. Qantîr, F. Eng. The base of a column of Rameses II. is visible in the cemetery. A quantity of limestone remains and a basalt architrave of the same king have also been found. Outside one of the houses is an inscribed box or trough of rough limestone, 26 inches × 18, with the base rounded. The hollow is rectangular, 9 inches deep. The inscription runs, "The hereditary prince, the divine father loving the god, the royal scribe, the chief

commander of the troops Set her khepshef," and the name of Rameses II. is inscribed in the centre. The mound here is very slight, but almost continuous with that of Hata'ne.

6. Samakîn (= Amarîn, Eng.) is a name that recurs on the road to Sallîye. Some palm trees in the desert beyond Pelusium belong to this clan.

7. Gezîret Abu Qêh (Abou Qahar, F.; Abu Kabih, Eng.).

8. Tel Far'ûn (marked but not named due E. of Abou Qahar, F.; Tell Badaui, Eng.). The site of Âmt, but the name is rarely used. Mr. Petrie has heard it spoken of as Tel Nebêše. The great granite shrine is well known in the neighbourhood, and is called at Fâqûs Taqîyet el Far'un, or "Pharaoh's eap," which is not inappropriate, though evidently arising from a mistake. Its local name, however, is Taq'at el Far'ûn, or Et taq'a simply, i.e. Pharaoh's niche. In future the mound is likely to be known as Tel Nebêsheh, for a well-known Bedawin sheikh, named Muḥammâd en Nebêsheh, has recently settled there and founded a struggling 'Ezbe.

9. (Tel) Gemaiyemi (Eng.; Mehallet el Ganim, F.).

10. Tel Zuwelên (Zâwâlin, F.; Tell Abu Uelin, Eng.). The name of two sandhills; the southern one, about 3 miles N. of Gemaiyemi, is the site of an extensive ancient cemetery now ravaged by the Bedawîn. From one tomb I obtained about 50 ushabti of a priestess of Âmen Ânkhnsnât. Amongst them was a piece of limestone cut into the shape of a tent peg with a head similar to those of the ushabti. Other objects apparently from the same tomb are a portion of a green porcelain vessel with long spout and small false handles projecting above the rim and pierced with small holes for suspension, a lion's head of porcelain, porcelain rings, with sistrum and hawk's head and disc on bezel; Isis and Horus of good work, wig coloured black, on back of throne Âst neb tauî; Neb qau, porcelain; scorpion with human head, porcelain; two blundered scarabs of steatite and porcelain, and innumerable short beads.

These are all pre-Saite. From another tomb came some long beads, and from a third bronze and lead eyes and eyebrows with long beads. These are probably of the twenty-sixth dynasty.

The other mound of Zuwelên is 1 mile N., also covered with opened tombs, but with some town remains at its N. end. This is only $2\frac{1}{2}$ miles S. of Sâh, and the two mounds together must have formed its cemetery. For previous finds at Zuwelên (Sueilin), see Tanis I. p. 29.

11. Sâh el Hagar (the village), and Tel Sâh (Fr. Eng.).

12. Tel Dibqu (ruines d'Ebqou, F.; Tell Dengu (but too far north), Eng.), according to Mr. Petrie, 5 miles N.E. of Sâh, and on the 31st degree of latitude; a large mound covered with Arab brick. It is lofty and steep on the N., the sides sloping away towards the E., and forming almost an amphitheatre round a central hollow. The bricks are regularly dug out and carried away. Large quantities of wood and woollen material are found in the ruins.

13. Ḥamadîn.

14. El Menâgi (el Kebîre and eş şağîre). Several in F. Eng. At M. el Kebîre, on the bare sandhill E. of the village and S. of the cemetery, lies a block of sandstone, 16 × 20 inches (see pl. xlii.). There is shallow sculpture on one side representing the two Niles kneeling, and holding the Sam; over the Sam sign are the ovals of Nekhtnebef. The tunic and feet of the king standing and his arm raised in adoration are visible behind the figure of the lower Nile. Uati probably stood at the other side. An inscription above the head of the lower Nile is restored with the help of a duplicate on the other half, and traces of a partial repetition of it remain behind the god. The inscription runs as follows:—"O Uati lady of Âmt, thy son, lord of the two lands *Râ xeper qa* lord of diadems *Nex̄t neb f*, cometh, he conducteth to thee the lower Nile with (?) all good things of the North country, that he (the Nile) may give all pure life" (of which the border of *ân̄x uas* is emblematic).

There are no mounds here. Nekhtnebf must have set this up as a record of cutting or clearing a canal, the water being admitted under the auspices of Uat of Amt, whose temple lay six miles distant. On the other side of the village, amongst the palm trees, there is a large block of granite almost buried, that probably belonged to a similar monument of another king. The canal perhaps corresponded to the Baḥr el Baqar (Eng.), which is the usual name of the once large canal that flowed past Defeneh, and which is usually supposed to represent the Pelusiatic branch.

A portion of a small canal running E. and W., and lying on the road from Nebêsheh to Hamadîn before the great canal or so-called Pelusiatic branch is reached, bears the curious name of Habrêš.

15. Samakîn (F. Eng.).

16. Qassasîn.

17. Šalḥiye (F.; Es Sâlahiyeh, Eng.).

CHAPTER VII.

TELL DEFENNEH—POSITION AND HISTORY.

42. In the sandy desert bordering on Lake Menzaleh, some hours distant on the one hand from the cultivated Delta, and on the other hand from the Suez Canal, stand the ruins of the old frontier fortress of Tahpanhes, Taphnê, Daphnai, or Defenneh. That such a point should have been selected may seem strange at first sight, but it was the advanced post to guard the great highway into Syria; and when we look at the details of its position, the advantages of it are evident (see small map on pl. xliii.). All traffic taking the northern route by Kantara, which was more fertile and convenient than that by the Wady Tumilat, must have skirted the southern shore of Lake Menzaleh, or of the swampy and canalized region which may have occupied that site in ancient times. The edge of the desert was the only suitable route within reach of the Pelusiatic branch of the Nile for watering. This line is now

the caravan road, and there can be no doubt but that men have gone down into Egypt along this line from the dawn of history. Immediately after passing the southern end of Lake Menzaleh there occurs a sandy plain, about a mile across, and bounded on three sides by water (see pl. xliii.); Menzaleh lies on the E., the Pelusiatic branch or canal on the N., and a fresh-water lake, through which the canal runs, on the W. This site is only open on the south, and on that side it faces the line of the Syrian road. It was, therefore, admirably adapted for a frontier guard, and we find that at least as early as Ramesside times it was occupied.

Till this year, so far as I know, no attempt has been made to work in this site, beyond a stay of two or three days by a native reis of the Bulak Museum. But my work there during two months in this spring has brought to light much of the history of the place. The first evening that I arrived there, I saw that the brick ruins in the midst of the plain were of a large building of the twenty-sixth dynasty; and I heard, to my surprise (for I had only come with the Karian camp in my mind), that it was known as the "Kasr el Bint el Yehudi," or "the Palace of the Jew's daughter." This at once called up the connection of Tahpanhes, or Taphnê as the Septuagint version is, with Daphnæ; and with the situation of the place before one, it is impossible to disconnect the modern name, Defenneh, from the ancient. Indeed the identity of these names seems to have been taken for granted by most writers on the topography of the Delta.

43. The earliest remains found here are a part of the foundation of a building of red bricks remaining beneath the pavement or platform in front of the entrance. From the occurrence of similar red bricks in the tombs of Ramesside age at Nebesheh, and from this being shown to be older than the twenty-sixth dynasty, it is clear that some buildings existed here in the nineteenth or twentieth dynasty. Curiously, a tale related by

Herodotos bears upon this; he says (ii. 107) that Sesostris (Ramessu II.) was, on his return from an Asiatic campaign, invited to a banquet by his brother at the Pelusian Daphnai.

44. But we reach firm ground when we come to the beginning of the twenty-sixth dynasty under Psamtik I. The foundation deposits here discovered give positive monumental evidence that the fort still remaining was founded by Psamtik I. Here the evidence of Herodotos is very valuable. He says that "in the reign of king Psammētikhos guards were stationed in Elephantinē against the Ethiopians, and others in the Pelusian Daphnai against the Arabians and Syrians, and others in Marea against Libya; and even in my time guards of the Persians are stationed in the same places as they were in the time of Psammētikhos, for they keep a garrison in Elephantinē and in Daphnai" (ii. 30). So far the agreement is just what might be expected; but there is another passage which is apparently shown by the excavations at Defenneh to concern Daphnai also. At Defenneh, the bulk of the population seems to have been Greek; Greek pottery abounds, not only painted vases in the palace, but all the common pottery appears by the potters' marks to have been made by Greeks. Iron works and iron tools are abundant, just as at Naukratis; and there is, on the whole, more evidence of Greeks than of Egyptians in the place. The garrison therefore must have been Greek, at least in part. Here then were the *Stratopeda* or Camps mentioned by Herodotos: "To the Ionians, and the Karians, and those who had laboured with him, Psammētikhos gave places to dwell in opposite each other, with the Nile flowing between; these were named Camps. . . . The Ionians and Karians continued to dwell in these places a long time; the places are towards the sea, a little below the city of Boubastos, upon the mouth of the Nile called the Pelusiace" (ii. 154). Here the camps appear to have been nearer to the sea than to Bubastis, as they are *πρὸς θαλάσσης*, and *ὀλίγον*

ἐνερθε Βουβάστιος πόλιος. It will be seen that they must have lain on the arm which flows by Defenneh, and it seems certain that there is no other Greek settlement anywhere near Defenneh on that line.

We see then that the guard which Psamtik stationed at Daphnai was the body of Karian and Ionian troops with whom he had fought his way to the throne, the reason for placing them in this region being doubtless to keep them as far as possible out of the way of offending the Egyptians, and yet to make use of them by posting them in the line from which danger was most to be feared, namely, the high road from Assyria. The settlement probably took place very shortly after the civil war and accession of Psamtik, and we cannot be far wrong, if we date the founding of this fort and camp at about 664 B.C. Not long after this other buildings were added around the fort, probably all of them being built within a generation after the first great block. It was most likely Psamtik I. who set up the great tablet at Defenneh in the temple of Khem, recording the clearing of the canal in order to supply his troops. Unhappily the king's name in the inscription is lost, but there is an indication that it contained S; and if so, it would be Psamtik, in accordance with all the probabilities of the case.

After the fort and camp were built, the Greeks seem to have settled there largely outside of the camp, especially on the eastern part of the plain. And considering that Herodotos says, "From the time of the settlement of these people in Egypt, we Greeks have had such constant communication with them, that we know accurately all that has happened in Egypt from the reign of Psammētikhos till now" (ii. 154), it is evident that the Greek troops were not merely settled in a strange country, but were a base of communication with the Greek world. And this again is shown by his continuing, "The slips of the ships, and the ruins of the habitations, existed up to my time." The shipping mentioned shows that a foreign traffic was kept up. *Ὀλκοί*, variously rendered "docks" or "rollers,"

would seem most naturally to be the slips up which the ships could be drawn from the water for repairs, the sense being a place to draw a vessel on. The settlement outside the camp is probably then the civil quarter, for merchants and sailors, apart from the garrison dwelling in the camp, which would easily hold 20,000 men.

45. The reign of Nekau gave, doubtless, an occasion for the use of the Daphniote garrison, when that king made his great expedition against Assyria. Then for the first time did a body of Greeks come in contact with the Syrians and Babylonians, and the Jews must have heard in the speech of their conqueror's troops the tongue with which they were afterwards to become so familiar. The slaying of Josiah, the deposition of Jehoahaz, the setting up of the tributary Jehoiakim, and the removal of Jehoahaz into Egypt, marked the first period of intercourse between Jews and Greeks. "The children also of Noph and Tahpanhes have broken the crown of thy head" (Jer. ii. 16).

This intercourse, however, was soon to be increased; three years later Nebuchadrezzar invaded Judea, and all who fled from the war would arrive at Tahpanhes in their flight into Egypt, and most likely stop there. In short, during all the troubles and continual invasions and sieges of Jerusalem in 607, 603, 599 (in which a wholesale deportation of the people took place), and above all in the final long siege and destruction of 590—588 B.C., when "the city was broken up," and all the men of war fled, every one who sought to avoid the miseries of war, or who was politically obnoxious, would naturally flee down into Egypt. Such refugees would necessarily reach the frontier fort on the caravan road, and would there find a mixed and mainly foreign population, Greek, Phœnician, and Egyptian, among whom their presence would not be resented, as it would by the still strictly protectionist Egyptians further in the country. That they should largely, or perhaps mainly, settle there would be the most natural course;

they would be tolerated, they would find a constant communication with their own countrymen, and they would be as near to Judea as they could in safety remain, while they awaited a chance of returning.

The last and greatest migration to Tahpanhes is that fully recorded by Jeremiah, which gives us the pattern of what doubtless had been going on long before. After Nebuchadrezzar had retired with his spoils, Gedaliah, the governor whom he had set up, was quickly slain, the country fell into anarchy, and all the responsible inhabitants who were left fled into Egypt to avoid the vengeance of Nebuchadrezzar. "Johanan the son of Kareah, and all the captains of the forces, took all the remnant of Judah, that were returned (from all nations whither they had been driven), to sojourn in the land of Judah; the men, and the women, and the children, and the king's daughters, and every person that Nebuzaradan the captain of the guard had left with Gedaliah the son of Ahikam the son of Shaphan, and Jeremiah the prophet, and Baruch the son of Neriah; and they came into the land of Egypt; for they obeyed not the voice of the Lord: and they came even to Tahpanhes" (Jer. xliii. 5, 6, 7). The last act in this history is mentioned by Josephus, when he says that Nebuchadrezzar "fell upon Egypt . . . and took those Jews that were there captives, and led them away to Babylon; and such was the end of the nation of the Hebrews" (Ant. ix. 7). As these Jews were fugitive and rebellious subjects of Nebuchadrezzar's own kingdom, it is most probable that he would avenge their last rebellion and flight from Judea by taking captive all whom he could. This indeed was contemplated by Jeremiah: "such as are for captivity to captivity" (xliii. 11).

46. We are now in a position, after finding that Tahpanhes was the seat of the Greek frontier garrison, to estimate the extent of the Hellenization of the Jewish race during the five successive periods of trouble in Judea between 607 and 587 B.C. In this twenty years a constant intercourse

with the Greek settlers must have been going on, and a wider intercourse than even a Greek colony in Palestine would have produced. Here were numbers of the upper and more cultivated classes continually thrown into the company of Greeks; all who could afford to flee had to become more or less acquainted with Greek language and ideas in their temporary exile. It was not a case of a single body of Jews going into Egypt, and not returning, but of continual ebb and flow, of alternate dwelling in the Greek settlement and of return to their own land, as the tide of Babylonian conquest repeatedly poured over Judea, and then retired; and finally came the deportation to Babylonia of a large number of those who had settled permanently to dwell in Daphnai. The whole circumstances were such as to give the best possible opportunity for the permeation of Greek words and Greek ideas among the upper classes of the Jewish nation. The bearing of this on the employment of Greek names for musical instruments and other objects among the Hebrews, at and after the removal to Babylon, is too obvious to need mention in detail. A fresh and unexpected light is thus thrown upon a question which has been an important element of Biblical criticism.

47. Of the residence of the Jewish fugitives here no material remains have been found in the excavation of the palace; nor is this surprising, considering the short time during which they occupied the place as an important political body. But it is not at all impossible that some part of the plain around the camp was occupied as the Jewish quarter; in fact, the little prominent part of the site on the S.E. seems just such a locality as would be likely. A full search of the plain might result in the discovery of Jewish remains.

Yet two connections with the Jewish residence may be noticed. First there is the remarkable name of the fort, "The palace of the Jew's daughter"; no such name is known anywhere else in the whole of Egypt. This is the one town

in Egypt to which the "king's daughters" of Judah came, and probably this is the one building which would be allotted to royal persons, who came with a large body of the more important inhabitants of Judea as political refugees. Here, if anywhere, history locates the Jew's daughters, the last remnant of the royal family recognized as such; and here to this day the Bedawin, the descendants of the very tribes who were kept in awe by that garrison, call the palace-fort after the Jew's daughter.

48. Another connection of a different kind is to be seen with the narrative of Jeremiah. "Then came the word of the Lord unto Jeremiah in Tahpanhes, saying, Take great stones in thine hand, and hide them in mortar in the brickwork (or pavement), which is at the entry of Pharaoh's house in Tahpanhes, in the sight of the men of Judah; and say unto them, Thus saith the Lord of hosts, the God of Israel: Behold, I will send and take Nebuchadrezzar the king of Babylon, my servant, and will set his throne upon these stones that I have hid; and he shall spread his royal pavilion over them. And he shall come, and shall smite the land of Egypt; such as are for death shall be given to death, and such as are for captivity to captivity, and such as are for the sword to the sword" (R. V., Jer. xliii. 8 to 11). Now this brickwork or pavement at the entry of Pharaoh's house has always been misunderstood, and served as a puzzle to translators. But as soon as the plan of the palace began to be uncovered, the exactness of the description was manifest. On the Plan pl. xlv. will be seen a large dotted area on the N.W. of the fort. This was a great open-air platform of brickwork, a sort of *mastaba*, as the Egyptians call it, such as is now seen outside all great houses, and most small ones, in this country. A space is reserved outside of the door, generally along the side of the house, covered with hard beaten mud, edged with a ridge of bricks if not much raised from the ground, and kept swept clean. On this platform the inhabitants

sit, when they wish to converse with their neighbours or the passers-by; a great man will settle himself to receive his friends and drink coffee, and public business is generally transacted there. Such seems to have been the object of this large platform; a place to meet persons who would not be admitted to the palace or fort, to assemble guards, to hold large levées, to receive tribute and stores, to unlade goods, and to transact the multifarious business which in such a climate is best done in the open air.

At the same time the actual way into the palace was along a raised causeway which rose at the back of this platform. From the platform a framing of removable wooden steps most probably led up to the causeway, along which the way led to the entrance to the palace at the east end of it, at a height of 6 feet 9 inches above the great pavement. This platform or *mastaba* is therefore unmistakably the "brickwork, or pavement, which is at the entry of Pharaoh's house in Tahpanhes." Here the ceremony described by Jeremiah took place before the chiefs of the fugitives assembled on the platform, and here Nebuchadrezzar "spread his royal pavilion." The very nature of the site is precisely applicable to all the events. Unhappily, the great denudation which has gone on has swept away most of this platform, and we could not expect to find the stones whose hiding is described by Jeremiah. I turned over all that remained of the platform, but found no stones within it. Some blocks of limestone lay loose upon its surface, but they had evidently never been embedded in it, but had only fallen from the masonry of the fort, and were covered with burnt earth and mud washed down from the destroyed walls. The site, however, is unmistakable.

Another discovery which is probably connected with this place occurred some years ago; but unhappily it fell into Arab hands, and certainty is not to be looked for. A native sold to the Bulak Museum three cylinders of terra-cotta bearing an inscription of Nebuchadrezzar, an ordinary text

referring to his constructions in Babylon, such as would be used for foundation memorials (see Prof. Sayce in Academy, 19th Jan., 1884). These were said to come from the Isthmus of Suez; and they apparently belong to some place where Nebuchadrezzar had "set up his throne," and "spread his royal pavilion." As he only passed by the Syrian road, and Daphnai would be the only stopping-place on that road in the region of the isthmus, all the inferences point to these having come from Defenneh, and being the memorials of his establishment there. That they should be now found after having been buried, is just explained by the denuded state of the great platform.

49. There does not seem to have been much activity in the place during the reign of Haa-ab-ra (Apries); of his predecessor, Psamtik II., many sealings of wine jars stamped with cartouches were found; of Haa-ab-ra only one plaque with his name, and not a single sealing; and of his successor Aahmes many sealings and other objects. This suggests that the place was not inhabited by any important officials, nor visited by the king during the time of Haa-ab-ra, and therefore it would be the more likely to be granted as an asylum to the Jewish refugees.

The next important step that we can trace in the history is the result of the accession of Aahmes. He had, as I have pointed out in "Naukratis" (p. 7), obtained the throne as the representative of the Old-Egyptian party, pledged to resist the Greeks. In consequence he restricted the Greek trade to Naukratis, and repressed it elsewhere under the most stringent regulations. Daphnai was the place which suffered most severely from this policy; and in order to completely break up the Greek commerce which had existed here, he deported the whole Greek garrison. This, as part of the changes on his accession, probably took place between 570 and 565 B.C. As Herodotos relates of the Karian and Ionian guards, "These at a later time king Amasis took away from hence and planted at Memphis, making

them his guard against the Egyptians" (ii. 154). The civil population of Greeks was also removed, as "the slips for their ships and the ruins of their habitations" were left desolate. All trade here was abolished, as any merchant going even by stress of weather to any port but Naukratis was forced to make the best of his way to Naukratis, and not allowed to break cargo anywhere else (ii. 179). A garrison of Egyptians was put in to keep up the fort, as is shown by the quantity of objects of the age of Amasis; and these were succeeded in later times by a Persian garrison (Hdt. ii. 30).

That the Greek trade was really stopped here entirely is shown by the remains found. An abundance of painted vase fragments belonging to the beginning of the sixth century occur in the chambers of the palace, and also in the camp. The latest fragments could not be later than the beginning of the Persian period; and yet if the trade had lasted in the slightest form till the free-trade days of the Persians, it is certain it would then have revived, and we should find the red-figured and later ware left here. The total cessation of Greek trade before the Persian period is then a strong confirmation of the exclusive privileges of Naukratis; and since there is nothing in the Greek pottery found which obliges us to date it after the beginning of the reign of Amasis, we may well accept the statement of Herodotos that all Greek influence here ceased at that time, and take the date about 560 B.C. as the extreme limit assignable to the varieties of Greek vase-painting found here.

50. One mention of Taphnes occurs in the Apocrypha; in the list of people summoned to his aid by Nabuchodnosor appear "all that were in ...Kades, and the river of Egypt, and Taphnes, and Ramesse, and all the land of Gesem, until you come beyond Tanis, and Memphis, and to all the inhabitants of Egypt, until you come to the borders of Ethiopia" (Judith i. 9, 10). This is manifestly unhistorical, as Nebuchadrezzar did not maintain

any suzerainty over Egypt, only overrunning the country to an uncertain extent, and then retiring. But it is at least an interesting evidence of the importance attached to the fortress of Taphnes in later times, when this was written.

It will now be as well to state the varieties of the name of this place in different authors.

B.C.

תפננס circ. 609 (Jer. ii. 16), but many MSS. read as follows.

תפננס 588 { (Jer. xliii. 7, 8; xlv. 14).
(Ezek. xxx. 18).

Δαφναί 454 (Hdt. ii. 30, 107).

Ταφναί circ. 200 (LXX, Jer. and Ezek.).

Taphnes Coptic.

Dafno Itin. Anton.

Δάφνη Steph. Byz.

Def'neh modern pronunciation.

There are two suppositions on the origin of the name, beside Brugsch's theory of Ta-benet; one by Rev. H. G. Tomkins (see Acad. Sept. 11, 1886), and the other by Mr. Griffith (see Chapter XIV.).

In Ptolemaic times the dwellings here were restricted to a small compass in the N.W. quarter of the plain, and do not seem to have been of much consequence. Of the Roman period there is scarcely a trace on the south of the canal, but many fragments of Roman glass, &c., on the mound north of the canal. Some tombs there seem to belong to an earlier period, and possibly a cemetery of the flourishing times of Daphnai may be found there.

CHAPTER VIII.

THE KASR AND CAMP.

51. As has been already mentioned, the ruined mass of the fort at Defenneh is known by the name of the "Kasr el Bint el Yehudi," or Palace of the Jew's daughter. That this was more than a mere garrison fortress is indicated by certain additional chambers built around it, which contained many articles that common troops would not be expected

to require; by the large quantity of the best painted Greek pottery, which belonged to the Kasr; by the fragments of very fine sculptured and painted hieroglyphs on limestone; by the large quantity of plaster sealings of jars impressed with the royal cartouches; and by the name Pharaoh's house—Beth Pharaoh—used by Jeremiah, who certainly was familiar with it. The Arab name of *Kasr* echoes the same, as that is not merely a fort (*hisn* or *kalah*), but a palace-fort, where a ruler would live with his troops; and as the mounds to ordinary view were not different from any other mounds in the country, not having any stone walls or statues to attract attention, this name of *Kasr*, so exactly suited to the character of the place according to other indications, seems to be a genuine tradition from ancient times, and not merely a chance appellation.

On referring to the Plan pl. xlv. it will be seen that several different periods are indicated by the differences of shading employed. The original fort of Psamtik I., founded about 664 B.C., is marked full black. Unhappily all the upper part of it had disappeared by denudation, and nothing that remains reached up to the platform of the top, on which the actual dwelling rooms were placed. Yet the height of the highest parts is 24 feet above the bases of the chambers. Probably the platform of the top was about 30 feet above the ground, as several of the chambers in the best preserved parts show signs of the springing of domes in their corners; the corners are rounded, and gather in toward the vaulting, which has now disappeared. It is not certain that all the chambers were thus domed over; many of them were filled not with fallen and washed-down brickwork, but with sand; this was the case with the southern large chamber in the middle, which is not likely to have been vaulted, as it is 16 feet 4 inches wide. Remembering how a sand foundation was always provided for stone buildings, it seems not unlikely that some superior building stood over this sand chamber. An indication of this was, that in the square chamber 35 adjoining this there were great numbers of

chips of limestone flaked off a piece of the finest hieroglyphic sculpture. Many of these chambers had probably had an opening in their vaulted roof, so as to be used as store-rooms; and that they were not all filled up to the level of the platform is shown not only by the sculptured chips found in 35, but by a few other things found in them, such as the upper part of a good statuette of a captive found in the third chamber W. of 35. The northern large chamber was either hollow and vaulted, or else a deep open-air store place, as some large blocks of fallen stone were found lying near the bottom of it. The form of its north end was not fully ascertained. On the eastern side the pile appears to be far more solid; but many small chambers might have existed there, filled up solid with brickwork, as several of those were which I cleared. When once a chamber is filled solid, it needs much searching to detect it, as the wall and filling are all of the same material—mud brick. When I first began work, the outlines of the chambers were nearly all invisible, and it was only by continual attacks on the surface that they were discovered, and their forms and sizes shown. The whole pile of the Kasr was a smooth rounded hillock of mud, capped in parts by bricks burnt in the conflagration, which had preserved the parts beneath them from crumbling into indistinguishable paste. Even the directions of the main walls had to be found out, and it was some days before the outline of the fort was clear.

52. There are many indications of changes in the construction, and these form the most puzzling question of the whole place. Continually on clearing a chamber to near its base, the wall was found to stand out in a different alignment (some cases are shown by lines in the chambers); sometimes the upper wall only rested on sand below, sometimes a fresh wall appeared within a chamber. In the northern large chamber were several dividing walls near the base, not at all in one with the upper walls. On the northern side,

where a chamber showed walls breaking line, I made a clear section through them to the outside; but both upper and lower walls seemed to end in one smooth face, without any difference on the outside. The sizes of the bricks again do not clear up the matter, for in one distinct case of earlier and later wall, there was no difference between the bricks. A positive case of different arrangement occurs in the southern large chamber, where the upper walls end, and a smaller square chamber is found within the larger going down 8 or 10 feet further, and slightly cutting under the upper wall. Yet the base of this lower chamber was just about the base level of the corners of the fort, and some pieces of pottery which cannot be referred to Ramesside, but rather to Psametic times, were found in the bottom of it. The evidence from dated objects seems against any earlier fort having been ruined and built over again. The foundation deposits, which were well beneath the corners of the foundation, lower down than the bases of any of the chambers, bore the cartouches of Psamtik I.; so the building could hardly be earlier than his reign. Then the jar sealing of Nekau was found on the flooring of chamber 22, and this is not only of the age of the fort, but after four periods of building (A, B, C, D of the plan) had all passed here since the curious basis of the fort was laid. The only explanation seems to be that the fort was begun with a different arrangement of chambers, and that for some unknown reason it was stopped for a time; then fresh builders came to work, and began with the present plan, only attending to the regularity of the outside.

53. How the original fort on the top of the platform 30 feet high was entered is unknown. Probably the approach was from the north, as the later entrance was on that side; and it seems most likely that a flight of wooden steps, which could be removed, was placed on the broad parapet along the inner side of the *mastaba*, and so bridged across the ditch left between this parapet and the fort wall. It is certain that at the fort in the

Pan-Hellenion at Naukratis the entrance was by a wooden slope or staircase, as no trace of building existed before the high entrance, and the wall was clear and bare.

The outer walls of the fort were covered with two or three coats of plaster; and beneath the present surface of the mound I often found this perfectly preserved, as fresh as when the Karians lounged around it. The bricks had been all pointed in the joints with mud mortar stiffly pressed in by the fingers, and not merely laid with a coat of mortar.

All the chambers, except one or two of the smaller ones which are filled with solid brickwork, were completely cleared out to the foundations; but scarcely anything was found in the sand and rubbish with which they were filled. In chamber 35 there were many flakes of fine hieroglyphs from an inscribed block, evidently chipped off on purpose to reface it. In chamber 40 was the upper part of a statuette of a captive, in hard limestone, of fine work, now at Bulak. In chamber 30 were some jars of the type pl. xxxiv. 23, of rough-faced red ware, rather thin and fairly hard, but poorly made: these were partly beneath the foundation of the wall. In the lower square chamber within the southern large chamber were some fragments of similarly rough pottery; and a piece with a rude wavy brown line on a white facing, which might at first be almost mistaken for the roughest late Roman painting, but which from its position must be the latest degradation of the fine colouring of the eighteenth dynasty, which fell off even in the Ramesside times.

54. The most important find belonging to this fort was that of the foundation deposits. I had become familiar with such in connection with stone buildings placed within a retaining wall, from finding them at Naukratis, and twice at Nebesheh, beside Mr. Griffith's find at Gemaiyomi; but nothing was known about the arrangements for brick buildings; indeed I much doubted whether

any deposits would have been placed beneath a purely civil building of such material. At last I tried the two most accessible corners, the N.W. and S.W.; unfortunately at the S.W. the man disobeyed orders, and began to work in beneath the wall. Before long he brought me a green glazed plaque (pl. xxii. 5) with cartouches of Psamtik I., which showed at once who was the founder, and proved the fruitfulness of brick foundations. This corner was thus broken up, and only the copper plaque beside was saved; but the other corners I entirely worked out with my own hands, and noted the position of everything. The plans of each corner are given on pl. xxiii. with sections of the lowest courses showing the depth of the deposits beneath them, and the absolute levels in inches above an arbitrary datum about 17 feet below sea level (212 to 227 below Menzaleh), or 500 inches below the highest point of the mounds, to which I always measured. In the N.W. and N.E. corners deposits of plaques (pl. xxii. 1 to 9) were found, all of which were engraved, both metal and stone, with the cartouche of Psamtik I. No other set of deposits have I yet seen with the hard stone plaques of jasper, green felspar, &c., engraved. But at the S.E. corner a greater surprise awaited me: there I first came on some teeth and bones of an ox, in tunnelling in below the wall, evidently the sacrifice of the ceremony; then a huge pair of corn grinders of full size in quartzite sandstone (figs. 15, 16); not mere models in limestone or sandstone, but the same things that were used in each household. They had not been worn at all, and were therefore a new pair used in some part of the ceremony for grinding wheat. Below the great lower stone was the libation cup (fig. 13) of green glazed ware, and beside that lay the various plaques. Here also were samples of lead ore and copper ore (figs. 10, 11). May these have referred to smelting works of the Greeks here, as they certainly did smelt copper and iron? or may they refer to the protection which the fort afforded to the caravan road for the metal trade from Asia?

The curious piece of alabaster (fig. 14) is of unknown purport; but it is paralleled by a much smaller piece of the same form in the little late foundation deposit of the building in the cemetery of Nebesheh (pl. xix., Nebesheh, fig. 7.). The following is a catalogue of the objects found in each corner:—

| | PL. xxii. | N.E. | S.E. | S.W. | N.W. |
|--------------------------|--------------|------|--------|------|------|
| Gold plaque . . . | fig. 7 | 1 | ... | . | 1 |
| Silver . . . | fig. 8 | 1 | ... | . | 1 |
| Lead . . . | fig. 6 | 1 | 1 | . | 1 |
| Copper . . . | fig. 9 | 1 | 1 | 1 | 1 |
| Carnelian . . . | fig. 1 | ... | ... | . | 1 |
| Green Felspar . . . | fig. 2 | 1 | ... | . | 1 |
| Lapis Lazuli . . . | fig. 3 | 1 | 1 | . | 1 |
| Jasper . . . | fig. 4 | 1 | 1 | . | 1 |
| Green glazed . . . | fig. 5 | 1 | 1 | 1 | 1 |
| Mud brick . . . | fig. 12 | 1 | 1 | . | ... |
| Lead ore . . . | fig. 10 | ... | pieces | ... | ... |
| Copper ore . . . | fig. 11 | ... | pieces | ... | ... |
| Libation cup . . . | fig. 13 | ... | 1 | ... | ... |
| Alabaster . . . | fig. 14 | ... | 1 | ... | ... |
| Corn-rubbers . . . | figs. 15, 16 | ... | 2 | ... | ... |
| Bones of sacrifice . . . | ... | ... | many | ... | ... |

This is the oldest set of foundation deposits yet discovered, and it is the finest in the quality of the objects: the models of tools, however, give the deposits of Ptolemaic age a different interest.

We may notice here a very trifling deposit found beneath the buildings which we shall next notice. Beneath the S.W. corner of the block of building E. of the fort, just S.W. of the chamber 19 C, a hole had been scooped out of the sand, cylindrical, 4 to 7 inches from W. face, 10 to 14 inches from S. face, and 1 to 12 inches deep below the base of the brickwork. This hole was filled with charcoal, and burnt bones of a small bird, of which I could preserve only one piece. Evidently a sacrifice (probably of pigeons) had been made on founding this addition; and the bones and ashes were collected and buried in a hole beneath the corner. This, and the ox bones above, show that a sacrificial intent was prominent in the ceremony, and that the rest of the objects were subordinate.

55. Turning now to the other buildings of the Kasr, the different ages of them may be seen marked on pl. xlv. The first addition was the large square block with cross shading (B) which

joins the fort-wall on the N. side. This apparently served as a new entrance to the fort, in place of the older plan of wooden stairs. At a level of over 6 feet above the *mastaba* (dotted in the plan), or 12 feet above the plain, was the sill of the doorway leading to these chambers. The block still remains in position, with a block beneath having a drain cut in its upper side, as shown in the plan. Rising about a foot and a half more up the passage, we enter an open-air court 12 feet 2 inches \times 14 feet 5 inches, which had a cornice and fluted moulding of limestone around the top of its wall. Another passage led out to the east, serving as a second entrance apparently; while a third led northward into the mass of building. The north part of this building having been greatly denuded, we cannot trace this passage for more than 22 feet from the court, up to which point it is horizontal; but it probably led to an ascent by which the upper platform was reached. As its floor is now about 18 or 20 feet below the probable level of the upper platform, and the distance to the N. wall only 60 feet, the ascent must either have been by steps, or else have turned in its course if it were a slope. The walls and floors of this court and passages are smoothly plastered; and though they were filled with burnt earth from the conflagration of the upper parts of the palace, yet the sides were in good condition when excavated. On the W. side of this block were found pieces of cornice with ordinary Egyptian *cavetto* moulding; these show that the outside was decorated with a limestone top, as well as the inner court.

After this block had been built, a second mass was added all along the E. side (period c); this only touched the previous block at a small point; but later a blocking was put in (period d) on the N. side, so as to leave a space enclosed between them (chamber 22). This space was floored with a smooth clay floor, and roofed over with a sloping roof some way below the level of the platform. This roof must have been very slight, probably of thin cross beams covered with palm

sticks and mud, just to keep out sun, rain, and dust; and the space below served as a store place. The trace of this roof remains on the W. wall, which is preserved above that level, owing to the complete baking it has had in the conflagration. On it may be seen a gently sloping groove on the face of the wall, beam holes below it, and the mortaring of the wall perfect beneath it, but washed off above it. This shows that a roof had protected the lower part. Around the top of the court thus left was a band of stone frieze, sculptured with the *khaker* ornament, painted in red and blue, so usual from the twenty-first dynasty onward. Within this chamber 22 was found the jar sealing of Nekau (pl. xxxvi. 2), which proves that the fourth period, d, of building was before his reign.

This block of buildings was by far the most fruitful in antiquities, as it includes a line of kitchens or store-rooms on the ground level. The group of chambers 2, 3, 4, 9, all entered by one doorway (of which the stone sill remains), was full of jars and pottery, and two or three weights were found in most of these chambers. The chambers 11 and 17 (entered by the previous second entrance to the palace which was turned into a passage) were filled up with earth to a higher level, about 5 feet above the outside group, and only 2 feet below the passage which led to them from the entrance court. In No. 17 was found the great Triton vase (pl. xxv.), which is the largest and finest discovered at Defenneh. It was in 99 pieces, evidently having been carried out of the palace above, and thrown away as broken in the first disused room that was handy. The further chambers 19 A, B, C, had no doorways on the ground level, and were probably reached by a wooden staircase from an upper floor, the long recesses in 19 A and 19 B being just suited for a staircase or ladder. On the N. and W. sides of 19 A are benches or recesses which were covered with pottery, jars stacked on their sides, dishes, cups, and a fine black and buff Greek vase (pl. xxxi. fig. 17). Iron pokers, a large flat knife, and other things were found here, beside several

weights. In the floor was a large sink-jar, placed half in the sand. In 19 c was a recess on the E. side, and a sink-jar placed in the wall on the E. of that with two little recesses on each side of the jar to stand small things in as they were washed up. The sink-jar was full of pottery (including the pieces of the fine vase, pl. xxxii. 5) and organic remains and fish bones mixed with it. This whole block of chambers was built with a slight batter in the wall, and covered with white plastering like the fort.

At a later time, perhaps soon after the building of these chambers, the great block of brickwork of period E was inserted to block off communication outwards from the palace on the E. side, leaving only the front entrance on the W. This block is still 20 feet high, and had to be cut through from top to bottom, to extract the N.E. corner deposit. Later still the long enclosing wall of period F was built around the chambers 19, and also the small block to narrow the passage in the palace. It seems probable that the space 26 was an open court, so as to light the chambers 11 and 17 without needing external windows.

56. Before describing the lesser buildings around, we will now notice the great *mastaba* or pavement in front of the entrance (dotted in pl. xlv.). All the N. end of this is so completely denuded away, that its limits can only be found where the brickwork is unusually deep around the edge. The southern end, and eastern side particularly, were, on the contrary, buried deep in wash and rubbish from the ruins above. This made it not at all easy to examine, and time failed me to work it out as closely as I should have wished. To at least determine whether any such stones as those mentioned by Jeremiah still remained, or any cylinders of Nebuchadrezzar in the lesser part yet undenuded, I had the whole of the *mastaba* (excepting a ledge on the S. side left as evidence) cut away to over a foot in depth and turned over, but without finding anything but a silver ring

(pl. xli. 33) and a few arrow-heads which had been lost there.

The body of the *mastaba* is from 20 to 40 inches thick of mud and brickwork, with a foundation of brickwork about a foot deeper all round the edge. The precise form of the N. end of the *mastaba* is not very certain, as only the foundation of the edging wall remains, and that may have been altered by enlargements or otherwise; but so far as it could be detected it is here marked. It was useless to try to follow it, as it was much worn away into a slope, and yet buried in washed mud, so that scarcely any Arab could track it correctly; it was only by cutting frequent sections through it that anything could be determined. On the W. side it seems to have had a bounding wall, at least on the southern part; possibly an awning was stretched across the corner thus formed between the western and southern walls, so as to make a shady corner. The two recesses in the southern wall at this corner seem as if they might be sentry-boxes for guards to stand in, so as to be sheltered from the sun. From off this *mastaba* there must have been a set of steps to reach a broad causeway which was all in one with the south wall of the *mastaba*; this causeway is 11 feet 4 inches wide, and probably had a parapet wall on either hand, now washed away. But from the raised ledge, or roadway, over 10 feet wide, along the west wall of the block of period B, there was probably also a flight of steps up to the causeway, for direct access without going on to the *mastaba*. The *mastaba* was about 3 feet above the original plain, and the causeway and entrance about $6\frac{1}{2}$ feet above the *mastaba* (the exact levels are given in Chapter XIII.). For defensive purposes it will be observed that the *mastaba* is carefully kept away from the fort wall, there being a complete drop down to ground level between the parapet and the fort, a drop of 10 feet on one side and probably 40 feet on the other, with a gap 10 feet wide. The wall was only allowed to touch at the N.W. corner, but here it probably did not reach within 30 feet of the top of the fort. The entrance, it will be

noticed, is well protected; an enemy's force must collect on the causeway, which was completely open to attack all along by missiles from the fort above; while the low roadway ran alongside of the wall from which it could be attacked. The mastaba was commanded by a cross attack from two sides, and no shelter could be obtained by means of any of the walls belonging to it.

The burnt brick wall marked on the plan in the mastaba is a piece of the foundation of a building, of which two or three courses remain. At the eastern end it was distinctly seen to be beneath the undisturbed surface of the mastaba, and therefore older, although the north part has been exposed by denudation. This is probably of Ramesside age, as compared with Ramesside red-brick tombs at Nebesheh. The bricks are $12.6 \times 6.2 \times 3.2$, the Nebesheli bricks being 13.5×6.2 .

The roadway which led up to the entrance can be traced by lines of chips, &c., down to the camp wall; and there is a distinct break in the inner wall near the Kasr, and remains of a stone gate, in that line.

57. To turn now to the other buildings around the Kasr. The oldest, so far as evidence goes, is the chamber 8 on the W., as in this the jar sealings of Psamtik I. were found. But from various indications (such as the stamp of Nekau in chamber 22, and the depth of remains in the eastern chambers 18 and 19 below articles of Psamtik II. and Aahmes) it would seem that all the buildings here were probably of the time of Psamtik I. Chamber 8 seems to have been devoted entirely to unsealing large jars; not a single jar was found in it, but dozens of lids and pieces of the plaster sealings. At 1, just at the N.W. corner of the fort, a scrap of painted pottery of the seventh century (pl. xxiv. 6) was found down on the sand. The chamber adjoining it is curious, with four recesses at the corners. The foundation of an enclosure

wall can be traced along the western side of the mastaba; but it is so nearly all gone (only an inch or two of mud remaining), that I could only find it by cutting cross sections.

On the southern side many chambers have been built to a considerable height against the fort, that at the eastern half reaching as high as the fort is preserved. Why such a mass of building was allowed, when the fort was kept so insulated on the E. and N., is not intelligible. One result is clear, that a great mass of limestone building stood on the top of the fort along this side, possibly such a high blank wall that they were indifferent to buildings being set against the lower wall. Most of these chambers are full of stone chips, from the breaking up and trimming of the stones when carried away. The chamber at 12, however, seems to have been the receptacle of all the broken pottery thrown down from the fort; it was entirely filled with shards. It looks on the plan as if the broad, long wall had been part of the defences of the fort, within which chambers had encroached. In fact, on each side may be seen a length of wall at 10 to 14 feet distant from the fort wall.

At the S.E. corner were some more chambers, 18 and 29, which seem to have been solely used in later times for throwing away good pottery, most of it painted Greek pottery. Why this should have been thus accumulated here, and nowhere else, is a puzzle. Fully nine-tenths of all the painted pottery of Defenneh was found in these two chambers. It lay in a bed of dust, which appeared close to the surface by denudation, in fact, the painted fragments were sticking out of the ground; and—first picked up by children in the dinner hour—they led me to begin work at 18, and then to search all the pottery of the neighbourhood, and find chamber 29 also. The bed of dust with pottery was only 9 inches or so in depth, and lay on a hard, smooth, mud floor. After clearing away the whole of it from 18, I then dug down below, and found two or three feet lower down a quantity of twenty-sixth

dynasty pottery, showing that the chamber must have been in use long before. This shows that this deposit of Greek pottery does not date back to the foundation of the fort by any means; but must probably be half a century or more later. Moreover, though a jar handle stamped by Nekau was found among the pottery, that might easily be twenty years old when thrown away. The best dating is obtained by finding jar sealings of Psamtik II. and Aahmes, mixed with the potsherds. This shows that the upper level—of painted Greek pottery—belongs to 595 to 565 B.C. But, as already noticed, the removal of the Greeks from here by Aahmes, and cessation of all Greek trade prevents our dating this pottery later than about 565 B.C. for its introduction, though it might, perhaps, be thrown out broken at a later date. With the pottery in 18 were found an iron knife, and a quantity of iron scale armour. A stone door-sill lay on the ground at the north end of the chambers of 18.

Having now described all the buildings of the Kasr, we will notice the rest of the camp (see pl. xliii.) In front of the Kasr was a brick wall, with a gateway in it; but the ends of this I could not trace on the surface, and I could not give time to clear up the course of the wall, as that is generally a very tedious affair, and takes up a large share of attention. The wall is only detected by the cessation of a strewing of pottery on its inner side, and a similar cessation of stone chips on its outer side; the brickwork is completely swept away to the ground, and the wash of rain and wind-blown sand disguise the foundations. Further out to the north wall of the camp is a quantity of stone chips; basalt, granite, sandstone, and limestone lie thickly on the ground, and apparently important buildings have been destroyed here. A line of chips of basalt, sandstone, and limestone mark the side of the roadway up to the entrance of the Kasr.

Just outside of the wall, lying on its edge, is half of a great sandstone stela, probably of Psamtik I., which states that it was dedicated in the temple

of Khem. But it would be strange if a temple should be built so close against the camp wall. Yet this seems as if it were the original place of the stela, as many flakes and blocks broken from it, lie all around it. The account of the inscription will be found in Mr. Griffith's chapter on the inscriptions (chap. v.); most unhappily, a flaw in the stone has just broken out the name of the place, that it ends in . . . *hor-t* is all that we can say.

On the west of the Kasr many chambers may be seen in the soil, filled up with stone chips: as these chips have hindered the denudation more than the mere brickwork, so they are left as a heap in the chamber walls. These chambers are shown by dotshade on the plan. Away to the S.E. were a quantity of buildings inhabited by workmen, the armoury of the camp. Iron arrow-heads strewed the ground, and were excavated by hundreds; the same of bronze; iron and copper slag abounded; and many other small objects were found. As it would not be worth while to excavate on a large scale without a definite clue, and yet, owing to denudation, the surface dust was richer than the general soil, I determined, instead of trying to dig down two or three feet to the sand, to only turn over the dust. This was far less labour, as it did not need to be put in a basket to remove it, but could be just raked over with a hoe, and pushed back by a child with a bit of potsherd; and in this way about six acres of ground were all turned up to about 6 inches deep. Sometimes a chamber would be worked out if anything good was found; and after thus turning the soil the plan of chambers and walls showed very plainly. For a description of the objects found, chap. xi. must be referred to.

At the south wall of the camp three heaps of chips were noticed in the middle, and I guessed that these represented the chips left in the roadway, and on either side, of a stone pylon that stood here. On excavating we found the corners of the foundation, where the stones had stood, but no foundation deposits had been placed

here. The N.E. and S.W. corners of the camp wall were also cleared, but no deposits were found. The great wall of the camp has been entirely swept away down to the ground by denudation; removed by wind and not by rain, as there is no wash of mud around its site. I walked across it from my tent to the work a couple of hundred times without perceiving it. At last I noticed a space clear of potsherds on the E. of the Kasr, and finding I could track it southward to where it turned a corner, I then guessed it was the wall of the camp. On cutting into it, it was found to be all clear mud, and therefore probably brickwork, though all semblance of bricks had long since vanished under the soaking rains. I had some difficulty in fixing it at the N.W. corner, and several pits there did not clear the matter up, as so much mud identical with it lies around it; hence I could only settle it by the direction of the north and west walls.

Beyond the camp there is little to be noted; the plain is covered with potsherds, as shown on the map (pl. xliii.), and walls can be found in almost any part. I searched in every direction for stone chips or broad walls that would indicate the site of a Greek temple, but was unsuccessful. A group of walls away to the east of the Kasr, I began on early in the work, hoping I had a temple site; but I found small dwelling chambers all over it, and sinks for washing-up, without any sign of an important building. A plan of these walls is given in pl. xlv. The work was very slow, as the walls were all but identical with the soil around them, and only two fellows were competent to track them. One lad, Khallil Sidahmed, was most skilful at this, and often it took me a long examination to prove to myself that he was right, and not merely cutting a trench as fancy directed. Yet some result was obtained, as this turned out to be the earliest Greek locality that we cleared, and most of the objects in pl. xxiv. were found here (marked 51).

The sinks which often occur here deserve notice, as it is the first time that such arrangements have

been cleared up. It was a custom in most rooms to have close to the wall, sometimes cut a little into it, a hole in the floor; lined down to, and into, the sand beneath, with an amphora which had holes in its bottom and sides to let the water out. This amphora was filled with large shards, and smaller pieces on the top, so as to let water flow freely away and yet support any cup or dish that might be washed. Fish bones are often found in these sinks, and the pottery is always covered with a concretion of yellow matter which seems of organic origin. Sometimes the sinks are much deeper, and prove to be veritable dry wells, one S.W. of the Kasr being about 10 feet in depth to the sand, all filled with shards. Sometimes jars were made on purpose for small sinks, as is shown in No. 37 (pl. xxxiv.).

At some distance south of the camp there is a mound bordering on the caravan road, with some pottery scattered to the north of it. On excavating in the mound, large quantities of limestone chips were found, together with some pieces of granite and basalt; and some limestone pavement was found *in situ*, as well as several brick walls, which are marked on the map (pl. xliii.). The bricks were between the rather varying sizes of those of the Kasr, and therefore probably of the same age, certainly not Ptolemaic or Roman. This may well have been the site of a guard-house by the side of the road, or, from the fine stones used, perhaps a temple. It is a very striking proof of the fixity of the line of road; for, had not a road passed here, there would have been no apparent reason for placing a large building far away from all the rest of the town, with a stretch of deep, sandy desert between; but its place by the roadside exactly explains this. It lies also just in the axis of the camp, probably where the branch road turned off to go up to the southern pylon of the camp.

Many pits were sunk at intervals all over the N.W. mound marked "Ptolemaic." This was evidently the site of the reduced town, after the Greek exodus had left the great plain deserted.

All across the plain there is not a fragment which can be dated later than the fifth century, B.C.; it is absolutely clear of later pottery, so far as I have been able to find. But on the N.W. mound there is pottery as late as perhaps early Roman times. Scarcely anything was found in these excavations, though I generally sunk large pits down to the water level, and cleared some large chambers. Three bronze pots of cylindrical form, and a lot of late amulets were about all that was found.

On the other side of the canal, which I rarely visited, there is late Roman glass strewn about, and an impressed glass seal with a galley in full sail was found here. Tombs also exist, and some have been of limestone. Doubtless objects might be obtained from here, but my time did not permit of working on that side.

CHAPTER IX.

THE POTTERY.

58. THE study of the pottery of Defenneh is the natural complement of the work last year at Naukratis; each explains the other, and shows by its relations and differences fresh results of the painted Greek pottery, which is one of the most valuable finds at Defenneh. Of the circumstances which give a chronological value to the main find of Greek vases here, I have already rendered an account in the previous chapter.

The earliest pottery found here, to judge by its style, is that among the buildings away to the E. of the Kasr. Here were found two bowls (pl. xxiv. 12, 13) which are distinctly non-Egyptian, and yet are not familiar in Greek types; they seem like the prototypes of the forms so common in the temples of Naukratis; with a reduction and a sharpening of the brim they would reach the black and buff bowl which may be called the Naukratite Apollo bowl; and on the other hand, a narrower form, with a base, reaches the white-faced Aphrodite bowl of

Naukratis. The Egyptians were not familiar with a wide neck or contracted rim to bowls and flat vessels, their forms are either an open bowl or a distinct neck, and the break of the curve and slight narrowing is distinctively Greek. Another early type here is the *stamnos* (xxiv. 10), the plain line pattern of which is like the early pottery at Naukratis, and distinctly archaic in comparison with the later ornament found on *stamni* among the fragments of chambers 18 and 29; there, about 580 B.C., this form is always decorated with the lotus flower, like pl. xxvi. 8. Again the neck (xxiv. 9) is earlier than the necks of the black and buff vases (xxxi. 8), of which it is the prototype. And the fragment of a *stamnos* with ΠΕΤ incised upon it retrograde, seems certainly to belong to the seventh century.

With this pottery was found the archaic stone idol (xxiv. 3), the terra-cotta, (xxiv. 4), and probably the rude idol (xxiv. 2). The finding of such figures here is of great value, owing to the narrow limits of the Greek occupation here. For once it can be safely said that we have figures certainly made within one century. The other pottery found in this early site, is marked 50 and 51 in the numbering of sites, which will be seen at the lower right hand side of the types or vases in pls. xxxiii. to xxxvi. The types are Nos. 1, 2, 4, 6, 8, 9, 10, 12, 14 without a base, 16, 19, 21, 22, 35, 37, 38, 39, 63, 75, 78, 93.

59. The bulk of the painted pottery, found in chambers 18 and 29, is remarkably different from the pottery found at Naukratis. The difference is partly due to age, as Naukratis lasted until Roman times, but that is far from accounting for the whole difference. The main fact is that all the types most usual at Naukratis are absent at Defenneh, and all those most usual at Defenneh are never found at Naukratis.

| | Naukratis. | Defenneh. |
|---|-------------------------------|---------------------|
| Buff and black "Apollo bowls" (Naukratis x. 4, 5, 6). | Hundreds dedicated to Apollo. | One piece on plain. |

| | Naukratis. | Defenneh. |
|--|--|---------------------|
| White-faced "Aphrodite bowls" (Naukratis x. 1, 3). | Hundreds dedicated to Apollo and Aphrodite | One piece on plain. |
| "Rhodian" pinakes, black and red radii and circles of spots. | Hundreds of pieces in town. | None. |
| "Korinthian" vases | Common. | None. |
| "Phœnician-Greek." | Common. | None. |
| Naukratis lines, purple and white. | General. | None. |

On the other hand :—

| | | |
|--|------------|----------|
| Situla-form vases (Defenneh xxv. 3, xxvi. 8). | None. | Common. |
| Stamni (Defenneh xxiv. 10). | None. | General. |
| Fikellura pattern (xxviii.). | Rare. | Common. |
| Fan lotus pattern (xxvi. 8). | None. | General. |
| White spots and crosses (xxix.). | Very rare. | Common. |
| Imbricated, with dancers, sphinxes, &c., (xxx. 2). | None. | Common. |

On looking at such a state of things, and remembering that this list includes most of the pottery found at these sites, it seems impossible to think that this ware came to these places in the ordinary course of trade from Greece and Asia Minor. Even if vases had been made by a wholly alien people, such as the Samnites or Phœnicians, it would be unlikely that the lines of trade would be so absolutely isolated to two cities in the Delta at the same period; but when both those cities were inhabited by Ionians, and both of them kept up a continual intercourse with Ionia for trading and information, and derived their imports through that Greek trade, this isolation is the more extraordinary. To agree that each of these types peculiar to one or other site was made on the spot, and that but little of all the pottery was imported, may be scarcely allowed by archaeologists; yet the facts of the case point unmistakably in that direction; and the probability that a ton of rough clay was easier to ship to Egypt than a ton of brittle and bulky vases is entirely in favour of this conclusion.

But there is also strong evidence that one of the most important classes of the pottery of Defenneh was made in the country. The situla-type of vase (pl. xxv. 3, xxvi. 8) is unknown, until discovered now at Defenneh, and it is obviously copied from the bronze situla of the Egyptians, which was very common from this period on to Ptolemaic times. Further, the designs on these

situla vases are in some cases of Egyptian origin. On pl. xxvi., which contains solely the situla designs on vases like fig. 8, will be seen (fig. 1) a hawk on a basket, which is a purely Egyptian sign, being the hieroglyphic *neb*. In fig 3 is a direct drawing of an Egyptian, which I have given again on a larger scale (reduced from a full-sized copy) on pl. xxix. 2.; the shaving of the face, the close cut hair (the lines of which are yellow on black), the circumcision, and the mode of fighting (which is just what is seen in Egyptian figures from the earliest age), all show that this is an Egyptian and not a Greek. The lotus group between the two fighters is again not a Greek lotus pattern, but like the lotus flowers on piles of Egyptian offerings. It cannot be doubted that this was painted with living Egyptians under the artist's eyes. If then there is good reason to attribute the situla vases to Daphniote potters, we are also led to attribute to the same source the *stamni*, which are of exactly the same clay, and decorated with the same fan-lotus ornament. With regard to the age of the pottery, it seems certain that all Greek pottery from Defenneh must be included within just about a century. The fort was founded, and the Ionians settled here, about 665 B.C., and the Greeks were entirely removed by Aahmes about 565 B.C. Few sites can give such a well-defined period; but probably no large collection of painted fragments is so closely limited as is the bulk of the pottery here, which comes from chambers 18 and 29, as this may be dated between 595 and 565 B.C., with a probability which only some very clear exception could refute. As, however, in no instance apparently is there any pattern or style which is known not to have been in use then, the case must be accepted at least for the present.

We have above seen what a great separation there is between the pottery of Naukratis and Defenneh; but so far as they can be compared, —mainly on unpainted pottery—the result is very satisfactory. The following are styles of

pottery which were found at Naukratis, and can be approximately dated by the levels as published in "Naukratis" I. (pp. 19, *et seq.*).

| | Apollo level. | ∴ B.C. |
|------------------------------|---------------|--------------|
| Fikellura | 290 | 550 } |
| " in town | | before 570 } |
| Polemarchos | 250 | 600 |
| Polledrara | 230—310 | 630—540 |
| Loop handles (D. xxxiii. 6). | 230—320 | 630—530 } |
| " in town | | before 570 } |
| Light drab. | 270—290 | 580—550 |
| White-faced rough red. | 240 | 610 |

These data were published before Defenneh was touched, and yet these are the varieties which are required by the results at Defenneh to date between 595 and 565 B.C.; excepting the last which is found in older sites there. The agreement is as complete as we could wish it, though working from very different data in places which had evidently very little connection. If we tried to date the Defenneh deposit by means of the Naukratis results, we could but say about 600 to 560 B.C., or just the period which the Defenneh results yield independently. Nothing could give us greater confidence in the conclusions than this agreement.

Since we have not a long stratigraphical comparison to work out, as in the Apollo deposits, it is not needful to provide such a classification as was required for Naukratis. But a brief description of the principal varieties should be given.

60. The *situlae* are of fine-grained hard pale buff clay, the examples of pl. xxv. being harder and browner, those of pl. xxvi. paler, and some (such as fig. 8) are soft light grey. The *stamni* are of exactly the same clays, colouring, and designs, but never figured.

The Fikellura ware of pl. xxvii. is dark grey-brown, rough ribbed inside, and white-faced in figs. 1 and 2; but pale red-brown with a creamy face and red pattern in fig. 3. On pl. xxviii. the ware is light brown with creamy face and red-brown figures in 1 and 2, or black figures in 3 and 4, with applied red (or "purple") in the fret and leaves of fig. 4.

The fine painted ware on xxix. 1, 3, 4, and

xxx. 1, 2, is of a hard light buff-brown, close-grained, and without any coloured facing; pl. xxx. 3 is very thin pottery for its size, with lustrous black and much applied red.

The black and buff ware of pl. xxxi. is usually rather dark in the body, and might be called red-brown in many cases (as 10 and 17); while others are almost grey (as 5, 11, 21), though this seems to belong more to the oinochoe or aryballos type of 11 and 21, than to the amphora type of 17. Figs. 1 to 8 are all on necks of amphoræ like 17. In many cases applied white is largely used, as on 1, 9, 10, 11, 15, 16, 19, 20, and 21.

The unfigured pottery of pl. xxxii. varies much. 1 and 2 are brown with a whitish facing, and red design. 4 is of a soft brown ware, with a ruddy-fawn facing, and brown design. And 5 is of a hard light brown ware with darker brown lines, the pattern on the shoulder being three times repeated, though there are two handles. This style of *stamnos* was common in chambers 18 and 29, both of this colour, and black lines on grey-brown ware.

Before leaving the painted pottery, it may be just noted how a single example may correct our apprehension, and warn us against relying too much on designs. The Fikellura vase, xxvii. 3, is almost identical in the upper part with the Polemarchos vase of Naukratis (N. iv. 3), the birds and fret forbidding us to suppose any great interval between them. Yet the lower part has a pattern which might be otherwise supposed to be half a century or even a century later. We could not have expected to see the honeysuckle pattern so developed and florid at such an early date as we must assign to this vase. An important detail of fabric is seen on the piece xxxi. 14, which shows the incised lines made before the black figuring was baked, and while the clay was still softened on the face by the application of the black wash; the lines have thrown up a burr without digging into the clay. This suggests that the fair long free sweeps of the incising, such as on the horses' manes of xxix. 4,

and xxxi. 11, were done on the unfired clay, and not after it had been rendered almost unscratchable by the final baking.

61. To turn now to the unpainted pottery, we have at Defenneh a mixture which is confusing at first, but at the same time very instructive. We find purely Greek pottery, and purely Egyptian pottery; and we have first to distinguish between them, and next to see, if possible, whether there is a mixed style, whether the Greeks learned from the Egyptians, or whether they stood quite separate. These latter questions we cannot finally settle, until we have examined purely Egyptian sites of the same age. The figures in plates xxxiii.—xxxvi. of types are numbered continuously, so that we shall not need to quote the plate number for these in the following account. And the numbers at the lower right hand of each type, refer to the list of sites, and the chambers on the plan, pl. xlv.

First we can set aside a number of forms as certainly made by Greek potters, since on pieces of such vases Greek letters (or Karian in some cases) are found incised by the potter while wet. Thus figs. 1, 6, 10, 12, and 39 may all be appropriated. Besides this some other types are common at Naukratis, and are therefore presumably Greek; such as 2, 26, and 44. And we may probably assign by their forms the following also to Greek hands, 5, 27, 32, 42, 43, 44, 48, 49, and 67.

Of Egyptian origin much may be distinguished, by its agreement with forms in other Egyptian sites. 3, 4, 8, 13 to 25, 28, 30, 31, 33, 34, 40, 45, 52, 53, 54, 55, 60, 61, 63 to 66, 69, 70, 75 to 100 may be fairly attributed to native potters. But there are some cases in which the form seems Egyptian, and yet with a Greek character in the curves of it; such as 41, 46, 47, 51, 68, 72, and 74. As something like these is found elsewhere in the Delta, I should be rather inclined to attribute them to Egyptians who were impressed by Greek models, or perhaps by Greek blood.

Some of the types figured call for notice. 2 is a form found in the early levels in the oldest stratum of Naukratis, from which I obtained a perfect amphora (Nauk. xvi. 4) only slightly shorter in the stem, which I attributed to the middle of the seventh century (Nauk. p. 21). Here this form is believed to range from the seventh century down to 565 B.C. A strange fact is that the amphoræ sealed with the royal stamps of Aahmes are of this type, with the characteristic white facing, and red lines curling about their surface. Whether Greek potters were employed to make the jars for the royal vineyards, or whether the wine was transported in skins and then poured into Greek jars and sealed in the palace at Defenneh is doubtful; or possibly it was Greek wine imported in these jars and sealed in Egypt, but this is less likely. All varieties of this pattern are found at Defenneh, the light brown with red lines, the white-faced with red lines, and the white-faced with black lines, just as at Naukratis.

The great loop-handled amphora, 6 (which is here shown with a pole passed through the handles to illustrate the mode of carrying it), is very common in fragments at Naukratis, as far as 530 B.C., when it appears to have died out. It is always of a light drab ware, sometimes whiter, sometimes more green. The bottom is always scraped and not turned, showing that it was made bottomless on the wheel, and hand-finished afterwards. The massive cylindrical handles are firmly applied, and never break off the surface, but crack through the jar when broken. The form is most admirably adapted for carrying a great weight, the strain coming nearly as a direct pull on the material with the least possible transverse stress, both when carrying it suspended or resting it on the ground. When placed in store it was buried in the sand floor up to near the middle; and this fine example, which still rings clearly, was preserved by standing thus upright, while all the amphoræ around it in chamber 9 were crushed in sideways by the pressure of the earth.

The small furnace 7 is a new type; the long nozzle to it being to attach the skin bellows without overheating them; such seems to be its explanation. The stands for trays or dishes, 8 and 9, are not common elsewhere; 9 is found in all parts of the plain at Defenneh, and may be a stool for sitting on.

The "Polledrara" ware, 12, of thick dark grey, has the massive cylindrical handles which characterize a rather different form found at Naukratis (Nauk. xvi. 6). While referring to this plate it may be noticed that a piece of a swollen-neck amphora like Nauk. xvi. 7, was found in chamber 19. B., showing that this belongs to the sixth as well as the fifth century B.C.

The curious form 13 seems to be a cover for placing over food to keep flies and dust away; if to be placed on a jar it would probably have some sign of fitting, and not be so deep. This form is also found with a small opening at the top, and with a short tube at the top: as if to allow the escape of steam, or to put a few flowers or herbs in, as is commonly done with water-jars at the present day. A large disc-shaped lid of the finest greenish-drab ware, which was kept at Bulak, has a cylindrical tube at the top with a perforated bottom to it, suggesting the same purposes as these bell-shaped covers.

The types 19 to 25 are all purely Egyptian, and are most characteristic of the twenty-sixth dynasty: the ware is always red and thin (except 22), but varies from a coarse lumpy surface, as in 23, to the finest polished dark red face, as in 20.

The strange pot 26 is exactly like what was found at Naukratis; the knob inside it is shown by the series there to be the prototype of the "Bacchic handles" of later times, the development of which can be seen in the types from Naukratis in the British Museum.

The type 29 bears on the origin of the "pilgrim bottle" form (67); but it looks, with the neck on one side, as if derived from the *askos*, and not from the Cypriote bottles such as

are found at Nebesheh (pl. iii.). It seems unmistakably the parent of the long barrel-shaped pilgrim bottles of the second century A.D., such as are found at Tanis.

The platters 35 and 36 are of the white or yellow-faced brown ware, which characterizes the twenty-sixth dynasty, and is found at Naukratis, until 610 B.C. It looks as if it were made to imitate the fine close drab pottery which belongs to the same period.

The sink pot, 37, has been already noticed; it is made on purpose to place in the sand, hole downwards, for pouring away water.

The amphora 39 was found with about a dozen others lying on the benches in chamber 19 A. They are of a dark dull red-brown.

The forms 40, 46, 47, and 51 are all of uncertain use, whether for cups or lids we cannot say. 40 is purely Egyptian, being found at Nebesheh.

The pot 55 is rather common in chamber 18, and one filled with resin was found in chamber 3. They are of brown-red ware, faced with bright polished red.

Whether 57 is early, or not, is uncertain; it was picked up by the Bedawin and brought to me, and its use, with the curious hole in the side, is unknown.

The Bes vases 64, 65, 66 are useful as showing how early that type began, and what its forms were. A fragment of the fine drab ware has an arm of Bes on it likewise.

The cups 75, 76, 78, 79 are difficult to get perfect. Dozens of broken ones were found; but the only perfect examples of the thin drab cups, 76, were taken out of the insides of large amphoræ, which were cracked, but not crushed in by the earth. The greater number of cups are shallower than No. 76, and sometimes have a slightly turned-out side.

The braziers, type 77, are rather common, but only one has survived with the top complete. The base of a large one was found in 19.

The various types of lids are placed together

on pl. xxxvi. figs. 80 to 100. They are the commonest of all forms at Defenneh, and are found by the dozen in any digging, but seldom perfect. They are of all wares, the fine close drab, the polished red, and the rough thick brown. They were many of them, 81, 95, 97, 98, intended to fit on a jar, like 96 or 19, 20, 21, 23, and 28. Others, as 81, 84, 85, 93, 94, fitted into a jar neck. And others again (87 to 92) seem as if intended to fit the cups 75-79. The reason for such an excess of lids at Defenneh may be seen in its isolated situation in the desert; all liquids (except water) had to be brought in jars, neither milk, honey, oil, nor wine, could be obtained under about a day's journey at least. Therefore every jar that came needed a lid, to keep out sand and flies; and the jars were soon broken into indistinguishable shards, while the lids retained their form.

The sealing up of the jars is illustrated by the examples on pl. xxxvi. A large bung-lid, such as 84, was put in and then fastened down and sealed (as will be noticed in chap. xi.); some lids have cross grooves, as 85, and others single grooves, to hold the string for tying.

Beside the pottery here illustrated, the finest of all, the beautiful drab ware, remains; but that is so generally broken up that its forms can hardly be ascertained. It is perfectly characteristic of the twenty-sixth dynasty, so far as I have seen, and therefore the forms are of less consequence, as the material suffices to show the age. It is sometimes, perhaps in the earlier examples, thick and massive, but always finely finished; a few types are given in 15, 70, 81, 91, 94, also thinner in 76 and 86; while it was reduced often to a thickness not greater than thin card, a sort of egg-shell pottery, of the most exquisite finish. Another very fine pottery, but seldom met with, is of a rich brown, rather soft, and polished with a glassy surface; it is only found in the form of thin plates, almost flat.

The sites of each type of form are marked to each figure, but a complementary list of the types

found in each site may be given. Where sites are practically equivalent they are here grouped together.

The earliest is of the beginning of Psamtik I., chamber 30, type 23. Then the sites 50, 51, on the east plain, types 1, 2, 4, 6, 8, 9, 10, 12, 14 without base, 16, 19, 21, 22, between 34 and 36, 35, 37, 38, 39, 63, 75, 78, 93, all probably of the middle of the seventh century. Then chamber 8 with Psamtik jar stamps, many lids of 88 type, and others varying from 91 to 93. Then 28 under the floor of chamber 18, with types 15, 17, 28 (no handles), 50, 54, 58, 76, many thick and coarse ones of 83, 91, and 99. Under 19 A. was a quantity numbered 32, with types 17, 30 (no brim), between 31 and 35, between 34 and 36, 35, 36, 58, 83, 90, 92 coarse, and 98. This so far probably includes only pottery of the seventh century B.C.

Of the first half of the sixth century, or possibly earlier, we have in chamber 35 type 19, and between 31 and 35. In the chambers 2, 3, 4, and 9, the types 2, 4, 6, 9, 11, 17, 20, 28 (no handles), 30, 31 (no base), between 31 and 35, 34, 47 (flat base), 55, 59, 61, 65, 79, 80, 84, 91, 99, and 100. In the chambers 11 and 17, were types 14 (small base), 30 (no brim), 31, 61, 80, 82, 83 (also coarser), and 100 (also shallower). In chambers 19 and 27, were types 4, 13, 19, 26, 29, between 31 and 35, 39, 46, 76, 77 (also larger), 81, 92 (coarse), 93, and 94. In the rubbish chamber on the south of the fort, 12, were many pieces of type 10, with Greek letters. On the east of the fort, 16, were types 35 and 98, with plates with low brim. In the painted vase chamber, 18, were types 2, 4, 12, 35, 47, 55, 61, 82, 83, 90, 92, 97, and 99; and in the other chamber, 29, were similar forms.

Beyond chamber 18 at site 25 were types 14, 19, 30 (no brim), between 31 and 35, 61, 88, between 91 and 93, and 92. In the dry well S.W. of the Kasr, 21, were types 2, 4, 10, 20, 79, and 98. In the dry well east of 19, numbered 31, were types 28 (no handles), 36,

and 46. In the dry well S. of the Kasr, numbered 54, were large quantities of the types 54 and 80. In chamber 22, high up, and later than other sites, were types 24, 83 thick and coarse, and 98. In the camp in general, reaching perhaps to the end of the sixth century B.C. were types 5, 7, 14 (small base), between 15 and 70, 16, 19, 21, 22, 25, 28 (28 without handles), between 31 and 35, 34 and 36, 35 and 70, 33, 42, 43 (two handles), 44, 45, 46, 48, 54, 56, 58, 62, 63, 64, 69, 71, 74, 76, 77, 79, 83, 83 coarser and very coarse, 90, between 91 and 93, 93, 97, 98, 99. The lid 85 is the latest drawn, as it was found in the Ptolemaic mound.

CHAPTER X.

REMARKS ON SOME OF THE VASES OF DEFENNEH.

62. [Mr. Murray has kindly favoured me with the following important observations on the vase paintings of Defenneh, as compared with those of other sites; and I gladly avail myself of his permission to publish them here.—W. M. F. P.]

“Nothing is more noticeable in Greek archæology at the present day than the eagerness with which painted vases are on all hands examined and discussed. It is noticeable also that a large share of this discussion turns on questions of date and the local origin of this or that style of vase painting. In these circumstances, the pottery of Daphnæ is a most valuable acquisition, by reason of the limits of time which Mr. Petrie has worked out for it, i.e. the earlier half of the sixth century B.C.

In addition, however, to these considerations of date and local influence or origin, the Daphnæan vases present some interesting points of view to which attention may be called. For example, it is interesting to find on one of the situlæ (pl. xxvi. 8) a representation of Bellerophon and the Chimæra, especially when

it is observed that Bellerophon, mounted on Pegasus, is kept to one side of the vase, while the Chimæra, with open jaws, stands waiting for him on the other side. More than that, the drawing is full of archaic spirit and beauty, though the illustrations here and elsewhere may not convey as much. It is surely strange to find a subject thus divided into two parts at so early a date. We are accustomed to such things in later vase painting, and even then they are not very common. Bellerophon was a Corinthian hero, but the scene of his adventure with the Chimæra was Lycia, and it is conceivable that the vase painter had chosen his subject from a consideration that any scene thus localized would be attractive to the Carians and Ionians in Daphnæ. Besides, Bellerophon would naturally share some of the popular favour accorded to Perseus in Egypt, seeing that the horse, Pegasus, on which he rides was brought into being by Perseus. We have a Medusa on the fragment, pl. xxvi. 10, and may reasonably supply a Perseus as the missing companion figure.¹ Bellerophon and the Chimæra were sculptured on the throne of Apollo at Amyklæ by Bathykles of Magnesia, and those who believe that this subject had been first worked into artistic shape in Ionia will be confirmed in their view by the occurrence of it in so Ionian a place as Daphnæ.

63. On a fragment of a situla, pl. xxvi. 4, is a figure of Nike, which suggests a comparison with the marble statue of her from Delos, the work of the sculptors Mikkiades and Archer-

¹ Compare the Ægina vase in Berlin with Perseus and Gorgons, *Arch. Zeit.*, 1882, pls. ix., x. The figures of bulls, horses, sphinxes, lions, which decorate that vase from Ægina, remind one of the animals on the Daphnæan pottery, while there is also a similarity in the system of geometric ornament employed to fill vacant spaces; but there is always this difference, that the Ægina vase is the more advanced of the two. The alphabet used on it is Attic. But Furtwaengler, who publishes it, *loc. cit.*, and in his Catalogue of the Berlin Vases, No. 1682, does not go further as to date than say that it is older than the François vase.

mos, father and son.¹ The wings of the marble Nike rise from her back, and not, as on the fragment of pottery, from her breast, which latter seems to have been the older manner. Both figures are alike in having wings to their heels, but they differ again in the rendering of the face and hair. Possibly in these matters, also, the vase painting represents a slightly older stage of art. Archermos was reported² in antiquity to have been the first to give Nike wings. If this report was true, and if the statue found at Delos was the one from which it originated, then the statue must be older than the vase. There was, however, another claimant for priority in giving Nike wings—Aglaophon, the painter, and in view of this uncertainty we may perhaps fairly decline to draw any argument from the report. Archermos³ is calculated to have lived in the first half of the sixth century B.C.

64. On another of these situlæ (pl. xxv. 3) is represented a winged and bearded figure whose body ends in a serpent, while in each hand he holds out a snake. The design answers to what we know of Typhon, and if that is so, we have here another instance of a vase painter utilizing local traditions or belief; for it was in the Serbonian lake near at hand that Typhon lay buried, according to the legend referred to by Herodotus (iii. 5).⁴ This much is certain, that the figure belongs to the class of earthborn beings, γηγενεῖς, giants. At the same time there is the fact attested by Pausanias,⁵ that on the box of Kypselos, Boreas, a kindred figure to Typhon

in some respects, was represented with the "tails of serpents instead of feet." If we, then, decide to name this figure Boreas, instead of Typhon, and if, further, we expect on the analogy of Bellerophon and the Chimæra, a figure related to him on the other side of the vase, we shall have no difficulty in identifying the figure actually there with one of the wind-gods, sons of Boreas, either Zetes or Kalais, both of whom Pindar⁶ describes as "men with purple wings rising from their backs." The figure being beardless and winged, would answer perfectly, so far, to one of the sons of Boreas. It is true that the wings do not start from his back; they start from his breast as usual, in archaic art, at least in art older than the chariot victory of Arkesilaos of Cyrene which Pindar here celebrates. The figure appears to be in the act of letting loose two birds of prey, which swoop down on a hare. That, again, seems a not inappropriate act for a wind-god. In the field above the hare is a grasshopper, or tettix, which from its association with the Athenians and Ionians,⁷ may be held to localize the figure in some measure to Attica, where the legend of Boreas and his sons was at home, if it was not also at home in Ionia, as some believe. On the whole then we may venture to identify these two figures as Boreas and one of his sons; and here it may be noticed also that the owl on the fragment, pl. xxvi. 5^a, clearly points to an acquaintance with Athenian symbols. The drawing of Boreas and his companion figure seems to be more archaic than that of Bellerophon and the Chimæra already spoken of. The figures are painted in black and purple on a white slip; a process which is attended by this disadvantage, that the white slip is apt to peel off, taking the black design with it, and leaving only the outlines

¹ See Petersen in the Mittheilungen des Inst. in Athen, 1886, pl. xi., p. 372.

² Scholiast to Aristophanes, Birds, 573.

³ Pliny, N. H., xxxvi. 11, gives the genealogy of Archermos, and states that his two sons, Boupalos and Athenis, made a statue of the poet Hipponax, who flourished Olymp. 60, from which it is estimated that their father must have lived towards the end of the first half of the sixth century B.C.

⁴ Pindar, Frag. 7, says that Zeus slew Typhon ἐν Ἀρίμοις.

⁵ v. 19, 1, οὐραὶ δὲ ὄφρων ἀντὶ ποδῶν εἰσὶν αὐτῷ.

⁶ Pyth. iv. 182, ἄνδρας πτεροῖσιν νῦτα πεφρίκοντας ἄμφω πορφυρέους.

⁷ Thucydides, i. 6, speaks of the golden tettiges which the old Athenians and Ionians before his time used to wear.

and the inner markings where they happen to have been incised through the slip.

65. This disadvantage had apparently come to be perceived by the potters of Daphnæ, or wherever else the makers of these vases may have lived. For in another class of vases yielded by Mr. Petrie's excavations, we see that the figures have been painted in black straight on to the red clay, and next fired at a heat which has burnt the colour into the vase, and has at the same time brought out a lustrous glaze. Among the instances of this process is a fragment of peculiar interest (pl. xxx. 3). It has the remains of two scenes, disposed in parallel bands, the one above the other. On the lower band are athletes wrestling and boxing, with a judge beside them, and three tripods as prizes for the victors. Evidently this is a representation of games held at the funeral obsequies of some legendary person, like the games in honour of Pelias on the box of Kypselos, or of Akastos on the throne of Apollo at Amyklæ. On the box of Kypselos, Pausanias (v. 17, 4), says that the tripods were represented in the scene, as they are here. It should be observed that the athletes, though they are drawn nude, are yet painted over the body with purple colour, as if to indicate a close-fitting dress, though none of the details of the dress are given. Thucydides (i. 6) tells us that it was not long before his time that the ancient habit of athletes wearing *διαζώματα* had been given up in the games at Olympia. There is, however, a vase, known as the Amphiaraios vase,¹ which shows that whatever may have been the case at Olympia, athletes were certainly in the habit of wrestling nudely in the games much before the time of Thucydides. In the case of our fragment we may, perhaps, assume a transitional state of things when the new custom of contesting games nudely had not yet been fully esta-

blished, that is to say, a state of things anterior to the Amphiaraios vase. On this latter vase was represented also the chariot race, with three tripods for prizes, and three judges to decide, and a horse race. The horsemen and horses have a strong resemblance to Bellerophon on our situla already described; while the bird which flies behind each horse is an element of design which occurs frequently in this same manner on the class of vases known, rightly or wrongly, as Cyrenaic. On other vacant spaces of the Amphiaraios vase, the painter has put lizards, a serpent, a hare, and a creature which looks not unlike a hedgehog. This vase has been assigned to the end of the sixth century B.C. by Professor Robert,² who claims it as of Corinthian workmanship, and points out the coincidences between it and the designs on the box of Kypselos. But this may be too late a period if our fragment represents a more advanced art, as it seems to do, and if the whole of the pottery of Daphnæ belongs to the first half of the sixth century. On the famous François³ vase in Florence is also to be seen a chariot race for prize tripods.

So far we have noticed only the lower band of figures on our fragment, with its resemblances to the Amphiaraios and François vases. But on the upper band of it there is the remains of a scene which bears a striking likeness to the uppermost band of the François vase. This scene has represented the hunt of the Calydonian boar. In the centre is Antæos lying prostrate under the boar, in almost identically the attitude of the François vase. In some points of detail, as in being beardless and having a spear in his hand and a helmet on his head, he differs as if the drawing might be a little older; while on the other hand, he differs from the Antæos on an archaic vase from Corneto,⁴ in the direction of being a little later and more

¹ Mon. dell' Inst., x. pls. iv., v.

² Annali dell' Inst., 1874, p. 110.

³ Mon. dell' Inst., iv. pls. liv., lv.

⁴ Mon. dell' Inst., xii. pl. x.

advanced in style. Our fragment ought then to stand between these two vases in point of date. Over the body of Antæos is the boar, behind which are the remains of a dog leaping on the flank of the boar, and the remains of two heroes, who on the analogy of the François vase ought to be Kastor and Pollux, while on the analogy of the other vase just mentioned they ought to be Meilanion and some one else.

We have thus on the fragment from Daphnæ two parallel scenes corresponding in general to two parallel scenes on the François vase, with strong resemblances also to scenes on other, apparently more archaic vases, found in Etruria, but bearing inscriptions in the Corinthian alphabet. There is no more difficult problem at present, in the history of vase painting, than these vases found in Etruria with Corinthian inscriptions; the problem being how far they are Corinthian productions imported into Etruria, or the productions of descendants of those Corinthian potters who, in B.C. 655, settled in Etruria, after being expelled from Corinth by the family of Kypselos. Unfortunately our fragment has no inscription. In other ways, however, it may have its uses in discussing this problem further. With reference to the manner in which the hide of the boar is rendered, that is, by means of short incised lines, we may compare the figure of an ape on an archaic vase from Caere, representing also the hunt of the Calydonian boar.¹ It is true that on this Caere vase the hide of the boar is not rendered as on our fragment, but the hairy skin of the ape is most distinctly so rendered. It has been usual to assign vases of this Caere class to the sixth century B.C., and some of them even to the latter half of the seventh century.²

¹ Mon. dell' Inst., vi. pl. lxxvii.

² See Dumont et Chaplain, *Céramiques*, p. 261, where the amphora, Mon. dell' Inst., vi. pl. xiv., with Tydeus killing Ismene is assigned to the second half of the seventh century B.C., and the vase, Mon. dell' Inst., vi. pl. xxxiii., with the banquet of Herakles is assigned to the sixth century. For

66. Another class of vases belonging to the black figure style, in the true sense of having the black figures burnt in on the red clay, is represented by the fragment, pl. xxix. 4, on which is painted a nude female figure on horseback; behind her flies an eagle; the space among her horse's feet is partly covered by a dog. The great size of the horse compared with the rider, the use of a saddlecloth, and the form of the bridle and collar, are features which we find also on one of the fragments of the sarcophagi from Clazomenæ,³ and on archaic reliefs from Xanthus in Lycia.⁴ These are features which may be traced to the influence of Persian, or at all events, Ionian art. Nude women—not Amazons—riding on horseback seem more to Asiatic than to Greek taste. Daphnæ is said by Herodotus to have been occupied by a Persian garrison in his time, and possibly it had been so held from the date of the invasion of Cambyses, who also had Ionians in his army, according to Herodotus (iii. 1). If the facts are otherwise in accord, there would be no objection in point of style to place these vases in the time of Cambyses instead of Amasis, whom he dispossessed. But it is hardly necessary to take into consideration the question of direct Persian influence, when there is every probability that Carians and Ionians living in a frontier town like Daphnæ would have been from the beginning of their settlement there affected by the arts and tastes of Asia Minor, if not of Persia.

67. The amphora given pl. xxxi. 17 is identical in shape with the Burgon Panathenaic vase. More than that, among the fragments of vases of this shape from Daphnæ, are several necks of amphoræ, from which it is to be seen that

the opposite view of Brunn, see his recent addition to his *Probleme in der Geschichte der Vasenmalerei*, p. 45.

³ See the fragment in the British Museum engraved in *Hellen. Journ.*, iv. p. 19, fig. 14. The two sarcophagi now in Constantinople are engraved, Mon. dell' Inst., xi. pl. liii., liv.

⁴ Murray, *Gr. Sculpt.*, i. pl. v.

on the body of the vase there had been left a red panel on which had been painted black figures exactly in the manner of the Burgon vase. They have also, in common with that vase, a purple ridge or cord round the neck. It has been argued, and is apparently accepted in most quarters, that the amphora with red panel was an Athenian invention.

On the neck of the Burgon vase is on the front a Harpy, and on the back an owl, the faces being in white and the wings aided with purple. One of our fragments, pl. xxxi. 5, represents the neck of such a vase with the figure of a Harpy very much like that of the Burgon vase, in respect of colours, but the drawing may be a little more archaic on our fragment. Whatever is true, therefore, of the Burgon vase as to date, will be at least nearly true of these fragments. The Burgon¹ vase cannot be older than B.C. 566, when the Panathenaic games were instituted. Certainly there is no older specimen of these prize vases known. Some assign it to B.C. 550. It may be added that a vase found in the tomb of Aristion was of this description, and as the stele of Aristion is generally placed in the first half of the sixth century B.C., we may assume the same period for the vases of this kind from Daphnæ.

With reference to the upper part of an amphora, which is sealed over the mouth, pl. xxxvi. 5, it may be possible to trace to this custom of sealing, a shape of vase which is still a source of some perplexity. It has been found at Mycenæ, Ialyssos, in Egypt and elsewhere, always of comparatively small dimensions, having a neck, two handles and spout. But the neck is useless for ordinary purposes, because it is completely closed over the mouth. It is, in fact, a false neck. The vase must be both filled and emptied from the spout alone. The shape of the vase has thus every appearance of being a derived, and not a simple shape, in

which case it may have had its origin in observing these amphoræ sealed up over the mouth. The name of pseudamphoræ might therefore be applied to vases of this form."

A. S. MURRAY.

CHAPTER XI.

THE SMALL ANTIQUITIES.

68. IN describing the small antiquities it will be best to notice first those few which there is good reason to assign to the seventh century B.C.; next the general bulk of the remains, which are of the sixth century; and lastly, the later objects, found at Defenneh and elsewhere in the neighbourhood, reaching down to Cufic times.

The earliest objects—after the foundation deposits, and some pottery—are probably the very rude figures found in the buildings on the plain, eastward of the Kasr (pl. xxiv. 1 to 4). These are of a style which has been hitherto very undefined in age; and when I found several such figures at Naukratis, it could not be decided whether they were archaic—i.e. of the earliest Greek times in Egypt, before the rise of better work—or archaistic, and belonging to the decadence of a barbaric relapse. Now such figures being found at Defenneh, and in a site which, by the pottery and other indications, is not even as late as the sixth century, at once fixes them to the archaic period; and further, as we know that nothing of Greek work here (unless, possibly, an ancient object imported) can be earlier than 665 B.C., we at once gain a fixed age for this class of figures. The horseman (fig. 1) was picked up by chance, and the precise locality is unknown; but its similarity to the stone idol (fig. 3), and the complete absence of Greek objects after the middle of the sixth century B.C., warrants us in dating it to the seventh century. This carries with it the age of a large class of such figures picked up at Naukratis (Nauk. xix. 5). The stone figure (3) is of the rudest type possible, without limbs or features; were it

¹ Pottier in Dumont and Chaplain, *Céramiques*, pp. 315-317.

not for a ledge representing the feet, it might be almost doubted if it were not a loom weight, with a notch to tie a string in. The terra-cotta (fig. 4) is comparatively shapely, but still very rude. This and fig. 3 were found with the bowls figs. 12 and 13. The terra-cotta (fig. 2) is much like some of the idols found by Dr. Schliemann in the early Greek sites; here we, at least, can date it to between 665 and 565 B.C., but its precise locality on the plain of Defenneh was not known, as it was picked up on the denuded surface. The terra-cotta soldiers' heads (figs. 7 and 8) are probably of the seventh century also, by the extreme rudeness of them; they both show the crested helmet.

Shell-carving seems to have been carried on here, as at Naukratis; a piece of a large cone shell cut up was found, as well as some small cones pierced for necklaces; and a piece of engraved *Tridacna*, like those found at Naukratis, was also picked up on the surface (Nauk. xx. 16). A button of shell (pl. xl. 16) is a new form in Egyptian remains.

The piece of a whetstone (pl. xxiv. 5) is noticeable, as it appears to bear an attempt at a cartouche by some one who knew nothing of hieroglyphs, nor indeed of any writing apparently.

69. The sealings of the amphoræ extend over the whole of the Greek period at Defenneh. The general system of sealing may be seen by the example of a complete jar neck (pl. xxxvi. 5), found with the painted Greek vases in chamber 18. First a large bung of pottery, made hollow, such as xxxvi. 84, was put into the mouth of the jar. This was next fastened down, sometimes by string alone, sometimes by a piece of thin linen beneath the string: the cast of the linen—as thin as muslin—may be seen in the inside of the plaster cap xxxvi. 4; here it was a band wound round the neck, and then drawn into a lump in the middle to tie it. The strings also passed across and across it, and then, on the tying up in the middle, a lump of sealing-clay

was placed, and six different seals of inspectors (like those in pl. xli. 32—35) were impressed upon it. (In two instances there are six seals, in one case there is the royal cartouche.) This clay crumbled and washed out afterwards, and left a cast in the plaster, showing the seals as in fig. 4. After the six inspectors had thus each put his seal on it, the jar was sent out to the plasterer, who capped the whole top with a head of plaster, and sealed it with the royal cartouche all over (fig. 5). But even this did not secure it; the neck (fig. 5) is an instance of a successful attack on the royal stores; the cap of plaster has been bored through just at the edge of the jar, and the large bung inside smashed through, so as to freely reach the wine; the piece of plaster broken out is here shown missing in fig. 5, though it was found with the jar; the hole just shows the edge of the neck, and was filled up with a scrap of the old plaster, and a smear of new of a different quality; no attempt was made to imitate the missing half of the cartouche, and this probably raised the cellarer's suspicions, and made him break off and preserve the whole jar-neck as evidence. The jar is one of the great white-faced Greek amphoræ with red lines; the pentagon on it is incised, like a pentagon on a piece of early pottery at Naukratis.

The series of sealings begins with a large number of Psamtik I. (pl. xxxvi. 1), found with a quantity of lids in chamber 8, on the west of the Kasr. Next there is but one of Nekau (pl. xxxvi. 2), found on the mud and mortar floor of chamber 22. Next, several of Psamtik II. (fig. 3), which are generally very indistinct, and were all found in the Greek vase-chambers, 18 and 29, mostly in the latter. None were found of Haa-ab-ra, unless some illegible ones, like those of Psamtik II., might be his. Two complete jar-necks and many pieces (including a fine top now at Bulak) were found of Aahmes, all in the vase-chambers, 18 and 29. A very neat little stamp of Nekau was found impressed on a drab pottery vase-handle in chamber 18.

In noticing the general antiquities of the sixth century, it will be best to group them according to material—stone, pottery, bone, &c., gold, silver, bronze, and iron; for though this is usually the least rational arrangement, yet here the impossibility of separating Egyptian from Greek work, and the main need of showing the special work and products of the place, make this the best system.

70. Of stone remains there are the curious figures of captives carved in limestone; they are all represented as having the legs bent back from the knees, and the ancles and elbows bound together (pl. xl. 8 to 13). The cutting varies from the rudest scratches on a mere peg of limestone, as in fig. 8, up to rather good work of a rough kind, as in fig. 12. The form being always an approach to a peg in the rougher ones, suggests that they may have been draughtmen for playing with on the sand, sticking them in a draught-board marked by little rows of pits in the sand made by the fingers, as the Arabs do at present. The form of the head-dress is peculiar: it generally rises in a ridge from back to front; sometimes, as in fig. 11, it resembles a wig. These were all found together, some thirty or forty in all, many being broken, lying in the desert on the east of the Kasr, beyond 29.

Of limestone also is the piece of a cake stamp (pl. xl. 14, 14A the reverse side) found in chamber 27. This is clearly Greek, and therefore before the middle of the sixth century, yet the style of it is what otherwise would be attributed to a later period. It shows that the cake-stamps of Naukratis (Nauk. pl. xxix.) may in some cases be much earlier than was supposed. With this before us, we might not be wrong in attributing some with the honeysuckle, leaf, or drop patterns to the fifth, or perhaps sixth, century B.C., instead of to the Roman imitative archaistic taste. Two limestone dice were also found, also seven alabastra $2\frac{1}{2}$ inches to 4 inches high, from the camp.

The Egyptian objects in stone are mostly amulets. Several examples of calcite (Iceland spar) have been found about Defenneh: beads, seal-stones, &c., but the only engraved one is the natural rhomb (pl. xli. 40) engraved with the name of the spirit *Ket* in a cartouche, and two *nefers* or *neferui* on the other side; this was doubtless a charm. A small hawk in greenish-white translucent steatite was found in the camp. Other amulets found were Taurt, cynocephalus ape, and three scarabs in hæmatite; lion curled round, ram with a scarab head, scarab, Horus, hawk, lion-headed uræus (pl. xli. 39) of very delicate work, star (fig. 38), and Tat of lapis lazuli; fifteen symbolic eyes and Taurt of grey syenite; snake's head in green felspar; papyrus in beryl; three symbolic eye-plaques in schist; crocodile and frog in steatite. The cover of an eye, hemispherical, probably from a cat's head, is brilliantly cut in rock-crystal, with the corners of the eye produced. A model rubber-stone was found in the camp, cut in slate (pl. xl. 2); also part of large dish of slate. A scarab in banded agate, found in or near Defenneh, is exactly of the stone and work of the Phœnician scarabs. A piece of a finely-polished syenite bowl was found in chamber 19. Three jasper earrings were found, the ring form with a slit in one side; one of them with a crenellated edge. Also a carnelian finger-ring, and draughtman.

The scarabæi are not important. One (xli. 42) of green paste, imitating jasper, is of the regular style of fine Phœnician work; it comes from the north of Defenneh. Fig. 54 looks Ramesside in its style. Fig. 55 is another of the rather common scarabs of Sheshonk IV., *Ra-kheper* ("Tanis," p. 40). Two scarabs of dark green jasper, 56 and 58, name Psamtik I. (or Uah-ab-ra) and *Ra men*, probably a Greek mistake. The obsidian scarab, fig. 57, is of a new king, probably of the thirteenth dynasty. Two blue paste scarabs, figs. 68, 69, are the only representatives at Defenneh of the great class of Naukratite scarabs, another evidence of the strange

isolation of these towns. Two small bronze scarabs were picked up.

Of stone-working there are many examples. Four plain seal-stones unengraved, one broken in drilling, were found, three of pale green translucent calcite (fig. 74), the other of white crystallized calcite (fig. 75); the three former are of the Syrian type, of which an engraved porcelain one (fig. 73) was found in the Kasr. A piece of a polished cylinder of jasper, which had been 2 inches across, was picked up by the Arabs. Drill-cores from tubular drillings were found of alabaster, obsidian, syenite, basalt, and jasper; also a piece of sliced lapis lazuli, showing all those stones to have been worked at Defenneh. Many pieces of designing tablets of limestone ruled in squares were found in the camp and in a chamber of the fort. Whetstones abounded; two of very fine-grained, soft stone, quick cutting, and of excellent quality, were found, 3 and 4 inches long, pierced at one end for hanging up. Another larger and coarser whetstone, 9 inches \times 2½ inches, of a sharp grit, fine grain sandstone, worn rounded by sharpening knives on it, was found in chamber 19; also a similar piece, 4¼ inches, was in chamber 17. A large number of tapering square whetstones of sandstone were found in the camp; and on a piece of one were some Phœnician and Kypriote characters (pl. xl. 1). Two basalt mullers for grinding were found in the camp. One syenite pebble pendant was found, like the dozens which occur at Naukratis. A piece of pumice was found in chamber 19; and some pieces of lead ore (galena) in the camp, from thin veins of ore, like the pieces of the foundation deposit. Of flint the only objects were a burnisher 2¼ inches long, and three struck flakes.

71. Of pottery, beside the archaic figures noticed before, there is a torso of a seated figure of rude work, found in the camp. A draught-board, made of a rectangular slab of terra-cotta marked in 3 \times 10 squares, found broken up, with some draughtmen made of rounded chips of pottery,

in chamber 9. Also a large plate scored up into 3 \times 10 squares very roughly. Many other pieces of plates scored up in the same way were found, suggestive of a habit of playing at draughts after dinner. Two or three stone slabs similarly divided were found. It was probably the idle life of a garrison which causes these objects to be commoner here than elsewhere. A curious little neck of a vase of drab pottery is distinctly Greek and not Egyptian (pl. xl. 3). A whistle in the form of an animal's head, blown through the mouth, is also in drab pottery, much like a whistle I found at Tell-el-Yehudiyeh, perhaps modern.

Many instances of inscribed pottery were found; one large jar with a symbolic eye incised beneath one handle, and one painted beneath the other, with a demotic inscription; another jar with demotic inscription; a demotic inscription on the large vase, pl. xxv.; and about a dozen fragments of demotic inscriptions on pieces of jars and cups. Also a shuttle of Neit incised on pottery, by rocking an edge-tool about ½ inch wide from side to side to produce a line; and an incised fragment, with *k-m-khu* (bowl, owl, sun on hills).

72. Of glazed ware there is a blue *ushabti* with inscription, a Shu, and an eye in green glaze, found with the painted vases in chamber 18, along with a smaller green Tahuti. A blue-glazed Taurt, 3½ inches high down to the thighs, crowned and holding one breast. A green-glazed monkey from chamber 29, with the painted vases. A Taurt (pl. xli. 72), a combination of Ptah-Sokar, Khnum, and hawk (70), a symbolic eye (71), all in green glaze of fairly good work, found with the porcelain seal (xli. 73) in chamber 2 or 3. Also a small crown of Lower Egypt, ½ inch high, blue glaze of delicate work, in chamber 4. Some finely made symbolic eyes, a plain blue *ushabti*, Isis and Horus, blue, found with a tiny drab lid 1¼ inch across, a conoid draughtman, and a piece of imbricated pattern vase (as xxx. 2), all in chamber 17. Pieces of thick blue ware "pilgrim bottle" in chamber 19. Some draughtmen of

white pottery (glaze lost), in form spherical, flattened below, in chamber 2; and an Anubis in green glaze, deep in 2. A blue paste button, with stitching holes in a rib behind it, from chamber 3. All these being from the Kasr, are dated to the twenty-sixth dynasty for certain, and probably about the middle of it. In the camp were also found many objects of glazed ware; the lotus heads of green and blue glaze (pl. xl. 5, 6), pierced, probably for handles of feather fly-flaps. The plaque of Haa-ab-ra (Hophra) (xl. 7), which seems as if made for a foundation plaque, but was found in a chamber in the camp along with other pottery. Many varieties of "pilgrim bottles" of green or yellow paste, with necks of lotus and palm patterns, some very graceful, and wreathed around the body with very varied patterns; many bearing portions of inscriptions, and one a longer wish than usual (pl. xl. 4): "May Neit give life and health always to the souls of all children," or "to all beautiful souls." One bottle is very peculiar: it is of a dark greenish-grey, with a band of bright, thick, green glaze around the wreath and around the edge; it is thin and small, but such thick glaze is rarely, if ever, seen before Roman times. A large number of blue-glazed amulets, beads, &c., were found in the camp, and a selection of these will be kept together in the British Museum to show the style of known work of the twenty-sixth dynasty. A ring bezel of grey-blue glaze, almost like that of Tell-el-Amarna, bears the head of Hat-hor (pl. xli. 41). A piece of a pot of refractory material, in which blue frit has been prepared in the furnace, for blue paint, was also found in the camp; it is just like what occurred in the scarab factory at Naukratis, and points to a manufacture of blue-glazed articles here.

Of other materials we may note the following. An ivory die found in chamber 27 (pl. xl. 15), and so carrying back such dice to the sixth century. Three ivory hemispheres $\frac{5}{16}$ to $\frac{6}{16}$ inch across, and top of an ivory papyrus flower, from the camp. A large quantity of white coral in natural

branches found in the south part of the camp. A jar of resin, the jar of type 55 (pl. xxxv.), the resin clear brown, found in chamber 3. And some incense, and native sulphur in chamber 17.

73. Coming now to metal work, the most striking object found was the piece of gold work (pl. xli. 10); the lower ends of this have been violently wrenched off some object, and as they have been made with a bend at right angles a little below the lotus, it seems most probable that this was the handle of a tray, with the straps of gold passing beneath it. The body of this was cast; and the dividing ribs of the lotus flowers, for holding the inlaying, were soldered on. The whole was polished and burnished quite smoothly, so as not to show any joint. No trace of the inlaying remained when this was found, but the two flowers were bent one half over the other, by the violence of the grasp with which it had been wrenched off the tray. Thus, found in a camp, we can hardly look on it as other than loot of some soldier. The question then arises, when would an Egyptian soldier loot a piece of Egyptian work? And we see an event which would exactly account for this, occurring at the most likely time, during the civil war between Apries and Amasis. It seems then more likely than not that this handle is a part of the royal plate of Haa-ab-ra (Apries, Hophra), and is thus the only relic of such luxury of living which is left to us. It was found along with about $1\frac{1}{2}$ lbs. of silver in lumps, buried in the camp on the S.E. of the Kasr.

Another fine object is the gold statuette of Ra (xli. 9), which is highly finished and burnished, of the finest work of the Saitic period. It was found in the silver amulet case, or shrine (fig. 8), the sliding lid of which had been left slightly drawn and forced inwards, showing the toes of the figure. It is the more satisfactory to find it so, since not only is this little suspensory box a unique object, but it guarantees the genuineness of the image found within it, since the lid is stuck tight, and

the side of the box had to be broken open to remove the figure. This was picked up by one of my workmen on the plain, and brought to me uninjured.

Other pieces of gold work are shown on pl. xli.; a funerary finger-ring (fig. 1), a large plain finger-ring kept at Bulak; earrings (figs. 2 to 7), of which about forty were found (including fragments) by the Bedawin who hunt the neighbourhood: pieces of globule work, probably of earrings (figs. 12, 13), and of chains (14, 17); symbolic eyes (figs. 26, 30); pieces of chain (figs. 18, 24, 25); beads and foil ornaments (figs. 19—23, 27); setting of a stone (29); and a piece of diopase set in gold. Where this diopase came from is not clear; it is now only known in Hungary and Siberia, but considering the copper-mines of Sinai, it is not impossible it may be found there.

74. Among the multitude of fragments of gold-work picked up by the Bedawin who hunt over the denuded surface of the site, were some important scraps bearing on the manufacture of these articles at the place. There are many globules and little dumps of melted gold; scraps of gold cut out of a plane surface by chiselling, and above all, one piece chiselled out bearing a beautiful hieroglyphic feather (*a*), evidently because of a mistake in the work which had to be altered; further, a piece of gold-foil, cut into the form for making one of the hollow earrings (such as xli. 2), was found with one end partly begun. The large plain gold ring found here, also seems as if it was still unsold and unengraved. Placing all these facts together, we can hardly doubt but that a jewellery trade was carried on, especially as scraps of gold ornament are commoner here than in any other place I know of. Again there is a profusion of minute weights, most of them under thirty or forty grains, many of only three or four grains; over a thousand having been collected in a couple of months by me, and such could only be of use for weighing

precious metals. We see then by all these signs that this was a manufacturing centre; and if so, may not Daphnæ be the source of much of the Greek gold-work with quasi-oriental designs found all over the Mediterranean? Here are all the elements: Greek workmen, on the high-road to Assyria, living in Egypt, close to Phœnicia, constantly trading to Greece, and making jewellery (as the abundance of their weights shows) on a large scale.

75. Of silver several wrought objects were found, and many pounds' weight of lumps of silver, melted and roughly cut up, besides large quantities of scrap silver in fragments of 20 to 200 grains found by the Bedawin. It seems most likely, on considering it, that this scrap silver was the equivalent of coinage in the pre-Persian days in Egypt, when the metal went by weight; and we should not conclude such finds to be a sign of a silversmith's place, but merely of a man's exchangeable wealth buried, as coins were buried in later times. Several lumps of silver were found with a silver bowl at the S.E. corner of the camp, buried close against the wall: the bowl is $6\frac{1}{4}$ inches across, and $1\frac{1}{2}$ inch deep; it is ornamented with three rows of broad dots punched on it; four dots in a group extending one inch, then a space and then another group, and so on round each of the three circles. With this was found a silver dipper (*trua*), the long handle broken and twisted up. Both of these articles are now at Bulak.

Many silver rings were found, mostly on the surface, by the Bedawin, but one (xli. 33) on the pavement outside of the Kasr. They all belonged apparently to priests or temple officials (see pl. xli. 32 to 35). One bears a winged scarabæus (36); and one has a silver scarab which turned on the ring anciently (37).

A fine ram's head with the uræus on it (pl. xli. 11), probably from a statuette of Khnum, was found in the camp, with two silver uræi, and a bronze Apis. A small silver Horus, much worn, four tetradrachms of Athens, and one of Ptolemy

II., complete the list of silver objects found at Defenneh and the neighbourhood.

76. Bronze objects were common in the camp, particularly arrow-heads, of which many hundreds were collected (pl. xxxix. 8 to 16). It is useless to do more than describe the principal objects, or those of interest. A bowl, $7\frac{1}{2}$ inches across and 2 inches deep (pl. xli. 17), was found in the camp with a dipper (*trua*) 17 inches long, and the large bronze lid (xxxix. 23). Two small pans, which from their convexity cannot be mirrors, seem to be most probably frying-pans (xxxix. 6, 7). The bronze stamp of Aahmes (pl. xli. 76) was found in chamber 19, with the stem of a dipper, and some arrow-heads which still retained the wood in the sockets. The knives found (xxxix. 19, 21) are a puzzle, as they do not seem ever to have had any sort of edge; perhaps they were manufactured here, and not yet sharpened for use; fig. 21, however, is from chamber 3. Chisels were found of various shapes (xxxix. 24 to 28), one in chamber 19A, and a duplicate of this is kept at Bulak. A staple found in chamber 2 is of interest, as it has been fastened to a thin bronze vessel; a washer of bronze was put round its tangs before they were bent over, so as to prevent its tearing the vessel by straining. A large quantity of bronze tubes were found, often curved, $\frac{1}{8}$ th of an inch across, and with signs of having been bound over with some string or stuff: they seem as if part of some furniture, or possibly, a metal-piping sewn into the edge of tents. More Egyptian articles are an Osiris found in chamber 18, a sistrum head in chamber 3, a situla $2\frac{3}{4}$ in. high in chamber 3, another $3\frac{1}{4}$ in. high in chamber 14, and a double-ended kohl-stick in chamber 18. That copper was largely wrought here, and indeed smelted, is evident from the large amount of waste lying about; the ground is thick with scraps and drops of copper and bits of slag in many parts, and pieces of large crucibles covered with copper slag are found.

Of lead a few pieces of ore (galena) were

found, and some pieces of a U shape, which were doubtless net sinkers.

77. Iron is as common as bronze, or rather commoner, and this shows well the relation of the metals in the early historic period to which these remains belong. The remains may be broadly divided into military and civil. Of military iron the principal pieces are shown on pl. xxxvii. The horses' bits are sometimes bars which have had loops of cord or leather at the ends, as in fig. 1, or with holes for the attachment, as in fig. 2, or riveted through cheek-pieces, as in figs. 5, 5a, 6. The twisted pattern of fig. 1 is shown also in 5a. Several lance-heads (fig. 4) and pieces of such, were found. The bident (fig. 3) may be perhaps for fishing, or it may be the butt of a spear like the bronze tridents of Nebeshch. The sword (fig. 7) shows the guard well developed (though now much broken away), and an equal stay at the end of the handle to prevent its slipping out of the grasp. The blade had a rib on each side for some little way from the hilt. The handle is curiously shaped, with a groove on either side; partly to lighten it, and partly to hold the rivets by which a leather cover was probably fastened on, without a chance of their galling the hand; such a hollow also would help the grip. A rather different sword-handle was kept at Bulak; it has a knob or pommel at the end of the handle to balance the blade. Another form, more like an ordinary knife, is fig. 17; the thickness of the middle of blade (the section being rhombic) seems to show that this was for warfare, but, if so, a guard was probably fastened to the handle. The knife (fig. 20) may be perhaps for civil uses; the handle shows well the grain of the wood, which was fastened on by five rivets of iron. The objects 8 to 11 are difficult to explain; possibly they may be ornaments for the peaks of helmets: the thin strips bent out splay at the bases of 9, 10, 11, seem as if to fasten the spike into some leather object, and yet it would not be suited for a spur, owing

to the barbed form : these barbs could hardly be for use, as the attachment of the spike by the splay branches would scarcely be strong enough to bear the wrench of dragging the barbed spike out from anything. On the whole then they were more probably ornamental. Similar spikes were kept at Bulak. Iron arrow-heads (xxxvii. 12 to 16) were found in great quantities, the denuded surface of the ground being strewn with them along the south side of the camp ; only the unweathered ones were collected, but about a couple of hundred of these were brought away. They are always of a tang form, and not socketed, which is exactly contrary to the usage for bronze arrow-heads ; the reason is that the iron were wrought, while the bronze were cast so that a socket could be readily made. The solid triangular form is the commonest (12, 13), though some are bladed (14, 15, 16) ; none are of the three-blade type of the bronze (xxxix. 9, 12). The large swivel ring (xxxvii. 18) is probably a part of chariot fittings. The scale armour (figs. 19, 19a, 19b) is the most unusual find of all ; scale armour is represented on a statue at Karnak, probably of Ramessu II., a corslet of scales is shown in the tomb of Ramessu III., there is scale armour on a bas-relief at Tanis, probably of Sheshonk III., while a piece of a corslet of leather with bronze scales, two of which bear the name of Sheshonk, is in the Abbott collection. The present example seems to have been a large part of a leather corslet, which was thrown away in the Greek vase chamber, No. 18 ; it was covered with scales of iron of the form shown in pl. xxxvii. 19b (all objects on this plate are half-size), which were originally about $\frac{1}{10}$ of an inch thick ; these scales were sewn on by six holes, each line of scales lapped over half the line below it so as to completely cover the stitching ; and each scale lapped over two-thirds of the previous scale in the row ; thus as each scale was put on the right-hand pair of holes was stitched through, going through the middle pair of the previous scale, and the left-hand pair of holes of

the scale next before that. Thus the result was a mass three deep sideways and two deep from top to bottom, making the whole mass six scales thick at every part. The inner surface showing the stitching holes is given in fig. 19, and the outer surface at fig. 19a.

78. Of civil iron-work the most common objects are chisels (pl. xxxviii. 15 to 20), of which about 40 were kept, beside many rejected. One was found low down in chamber 11, left before the higher-level floor was made opening on to the entrance from passage 26. Another was found with an iron staple in chamber 19. A broad form of wood chisel is shown in fig. 22, and the socket of a large wood chisel like those found at Naukratis in fig. 3. A large long metal chisel was found, with a square shank and pointed end (fig. 2). Two pickaxes are of a form new to us (fig. 1), none like this being found at Naukratis. The large double-edged knife (fig. 6) is a splendid specimen in perfect condition, found in chamber 19A ; the grain of the wood on the handle is very plain, both the cross-piece on the haft of the blade fastened by three rivets, and the handle itself fastened by two rivets. Three pokers (figs. 11, 12) were found with it, of the type of that from Naukratis. A small knife (fig. 23) was found in chamber 18, and another in the camp. The knife or razor without a handle (fig. 8) was also found in chamber 18. A large auger or rymer, apparently, with a cross-head handle is shown in fig. 4, and some very curious rasps or borers in figs. 9, 10 ; these are made of a piece of thin sheet-iron, punched all over with holes like a modern grater, and coiled round into a cone ; they have been found with string at the base, and fitted on to wooden handles, making a sort of rat-tail file or rasp : five were found, three of them in chamber 17. The axe (fig. 24) is of a different type to that of Naukratis, which had a socket ; but fig. 21 seems to be a socketed plough-share of rough form. A block of iron $4 \times 4 \times 1$ was found at the bottom of the

chamber adjoining site 1 on the plan, lying on the sand in the corner. The trident, fig. 5, may be intended either for fishing or for a spear-butt. The fish-hooks, fig. 14, are exactly like those of Naukratis. The object, fig. 7, is of unknown use. A large quantity of iron scraps, apparently a workman's scrap heap, was found in the camp, including the side piece of a horse's bit, arrows, a hook, a cruciform piece of thin sheet-iron, squares of sheet-iron $1\frac{1}{2}$, $1\frac{1}{8}$, $\frac{3}{4}$ inch, &c.; a piece with a square-toothed edge, probably for riveting it on by a row of laps to another piece of sheet, and much slag. In another place was a mass of thin sheet-iron with strips of bronze and iron, apparently part of some armour inlaid with ribs of metal. The amount of slag found all over the S.E. of the camp was astonishing; some was brought away, including a complete crucible bottom of slag mixed with charcoal. Some very fine hæmatite was also found. It is evident that Defenneh was as important a place for smelting, and iron working, as Naukratis; and the light that these finds of arms, armour, and tools of all kinds, throws on archaic Greek metallurgy and workmanship is of permanent value.

79. We now turn to the later objects found at and near Defenneh, the exact site of which is uncertain unless here specified; they were mostly picked up by the Bedawin, who hunted all the neighbourhood for me as far as Tell Sherig (or Belim as they call it) at nine miles to the north.

The plain of Daphnæ, in the midst of which the camp and Kasr lie, is absolutely free from all objects of a later period than the twenty-sixth dynasty, so far as I could find by continually searching it during my stay there; but at the N.W. of it is a mound, which is the highest of the place, and usually called Tell Defenneh; this is of later age, but not reaching to Roman times. In excavating here two bronze vessels were found, cylindrical with flat bases, 4.0 in. across and 4.8 in. high, and parts of a large bronze pan with a handle; with these were a large quan-

tity of glazed pottery amulets of late work, probably late Ptolemaic; as the varieties of a large number are worth noting they are here catalogued. Khnum 4, Tahuti 4, Shu 4, Taurt 5, Hapi bull 5, Lion 5, Monkey 5, Ram 2, Rabbit 5, Scarabs 5, Eyes 4, Papyrus sceptres 5, Lower crowns 5, Upper crowns 5; beside some much smaller and ruder ones, Shu 2, Bes 1, Cynocephalus seated 2, Hawk 6, Cat 6, Lion 2, Rabbit 2.

Of stone objects the main class is that of beads, which were found in large quantities in the neighbourhood. As the age is uncertain, it is useless to describe them exactly; suffice to say that the forms are spherical, ovoid, bugle, pear-shaped, discoid, discoid with edge or double cone (only amethyst and carnelian), square prism, hexagonal prism, square prism with replaced corners (only carnelian), and pentagonal rounded bead (only syenite), fluted, beside irregular shapes. The materials are clear quartz (rock crystal), milky quartz, amethyst, carnelian, clear chalcidony, agate, jasper (red, black, green, and yellow), onyx, plasma, beryl, felspar (green, red), brown porphyry, garnet, lapis lazuli, turquoise, calcite (Iceland spar), syenite, and mother-of-pearl. Ten examples of engraved stones of the Roman period were found, on garnet, clear quartz, and carnelian, some of very good work of its period. I found half a Cufic seal of lapis lazuli at Tell Sherig.

Of glass a tolerable amount was obtained, both of beads and of pieces of vases; all probably of the Roman age, and mainly from Tell Sherig. The beads are of the usual types, blue eye-beads, green with yellow, fluted, zigzag, hexagonal mock beryl, flatted hexagonal blue, amber polyhedra and fluted, clear with gilding inside, mock onyx, black with red waves, green stripe with red and white eyes, blue and white millepore with red ends (hexagonal prism) twisted yellow, black with red or white zigzag, and covered with broken scraps stuck in. The fragments of cups, &c., are of the usual varieties of Roman glass; millepore, of yellow in green, yellow in brown, red and

yellow in green, white in purple, and yellow in white; wavy "Phœnician" of white on blue, white on purple, blue, yellow and brown on brown, yellow and white on blue, jasper-red on black, yellow on blue: wavy cups of pink-opaque, blue, and yellow mixed, also clear green on opaque white; a bangle of clear white with twisted red; yellow glass "Phœnician" heads, figures of Bes in yellow, Baubo in clear green (xli. 78), a term in clear blue (xli. 79), Isis in light blue, and a cat in brown; stamped pendants with Cupid on lion (xli. 77), and Cupid with goat (xli. 81) of amber glass, head of Anubis (?) of green glass (xli. 80), and a full face from a bottle-handle of green glass; knobs or bosses for inlaying of clear white, yellow, blue, pink, and green; pieces of cups engraved with line patterns, of yellow and blue; mosaic of an owl's head, very delicate and minute, of which (fortunately getting a piece of the rod) eight slices have been cut and mounted on glass slips; also a wing and a piece with red and black rosettes. Two Cufic glass weights are the latest glass objects. I found many pieces of coloured flat glass, probably from windows, at Tell Sherig; purple, pale purple, blue-green, and pale blue.

80. An aureus of Valens, and a Cufic dinar, were brought up to me, and several of the pieces of gold ornaments already described may have come from the northern sites.

Of bronzes a large quantity of small objects were brought in; but it is needless to do more than note the main classes. The numbers of figures of deities were, Osiris 13, Horus 10, Isis and Horus 7, Anubis 9, Nefertum 4, Khonsu 6, Tahuti 1, Amen Ra 1, Bes, seated squat, 1, standing with sword 1, part of Neit 1, upper part of winged cat-headed Bast (?) 1, Aegis of Bast 3, one with handle (pl. xxxix. 4). The usual sistra, feathers, discs, flails, sacred animals, &c., were found. Two arms from a figure holding a tambourine, with a *bennu* on each side of it, were found in a chamber of the Kasr. A bell 3·3 inches

high (xxxix. 3) comes from a northern tell. Bronze rings were common, 33 in all being brought up, mainly Roman and Cufic, of no particular interest, with the usual devices; one is Egyptian, minutely inscribed *Ptah-hotep*. Buttons made concavo-convex, with a bar across the concave back pierced for sewing on. Beads, pentagonal, hexagonal, and round. Swivels for putting through eye-holes. Chain of 0 and of 8 links, and of woven wire. Nail-heads of all forms, flat, round, massive parabolic, pyramidal, rosette, and concentric circles. Earrings of the type of xliii. 2, and of wire. Also many small pieces of unknown use, such as xxxix. 5. A curious seal with a man, bearded, with long hair, holding up two crocodiles by the tails is worth notice (pl. xxxix. 1). Many rings were also found, 43 in all, varying from $1\frac{1}{8}$ to $\frac{1}{4}$ inch across, probably from curtains or tents. It seems evident that there are some considerable sites to the N. of Defenneh, and Tell Sherig will scarcely account for all the things brought to me; there may be another camp somewhere (according to the notice of the two camps of Herodotus), beside the small settlement with tombs close to the Defenneh canal. This district is worth more examination, which I should have given it had not Defenneh occupied every day up to the close of the working season.

CHAPTER XII.

THE WEIGHTS.

81. THE past year has proved even more important for the study of weights than the first season at Naukratis. While at Naukratis last season with Mr. Gardner a large number came in from the native diggings, and after I left still more were brought, so that he returned with 358 altogether, which I have worked out and treat of in the present chapter; thus we have 874 weights from Naukratis in two seasons. At Nebesheh but few weights were to be had, only 21 in all being obtained there. But at Defenneh the supply seemed inexhaustible. I have bought over 70 in one day,

picked up on the denuded surface of the ground by the Bedawin, who find them both at Defenneh, and at sites to the north of that on to Tell Belim. The whole supply there in two months was 397 stone weights and 1600 metal weights. Altogether over 4000 weighings were performed, of which Mr. Spurrell most kindly did nearly a thousand. Unhappily, owing to the weights of Defenneh being found exposed on the surface, they have on the whole suffered more by weathering than those of Naukratis, which are found bedded in stiff mud that has prevented any access of air, and has preserved all the products of corrosion around the weight. The metal weights of Defenneh I have therefore found it needful to set aside for a special research; though every one has been weighed in air and in water, and it did not seem a very serious matter to work out their original values, yet a fresh difficulty stood in the way, for they proved to consist of all sorts and conditions of alloys, from almost pure copper down to sulphides of copper and tin, with perhaps other materials. Probably these alloys are the black and white bronze of the inscriptions. Under these circumstances even the specific gravity fails to show us the internal state of a weight; and fresh modes of examination must be worked out and formulated before we can say anything exact as to the original values. The whole subject of the modes of patination requires discussion, and some unexpected results have appeared; as, for instance, that weights lose by exudation of their more oxidizable alloys from the whole mass, leaving a sponge of metal; and the last stage of this course ends in the complete replacement of the weight by a siliceous or calcareous pseudomorph of the exact form and polish of the original. Thus are produced those strange casts of coins, which appear as if made artificially in plaster (see "Tanis," p. 40). The whole of the stages and proofs of this alteration I hope to work out and state in future: suffice to mention it

here, to show the questions which arise in dealing with 1600 metal weights. The setting aside of these, however, does not much affect in any case the results which are here stated; for the changes of metal weights are in general so great that they are worthless for showing the exact standard, though of as much value as any for ascertaining the distribution of different standards and the forms. The limit of 2% error excluding a weight from the curves of results, which I saw need to impose in dealing with the Naukratis weights before, I have still maintained as essential to a proper treatment of the results. I have also found the need of another limit, when a large quantity of minute weights are in hand; it is clear that a weight of 10 grains cannot (with a given imperfection of balance) show a standard as accurately as a weight of 100 grains; hence some limit of smallness is needful, below which weights fall under much the same uncertainty as when they have lost any considerable percentage of their substance. From comparing the curves of distribution of the $\frac{1}{16}$ ths, $\frac{1}{8}$ rds, and other Kat weights (as the standard most fully represented), it seemed best to draw the line at 40 grains, thus including in the curves all the $\frac{1}{8}$ rds of the shekels and kats. Perhaps, seeing the number of erratically low and high $\frac{1}{8}$ rd kats, this may be too low a limit, and 60 grains might be safer; but, at least, if the source of these stray groups is noted, not much harm will have been done.

82. The general arrangement of the catalogue of weights is on the same lines as that of last year, and therefore the prolegomena need not be repeated. The only difference is that where a weight is under the limit of size a bar is put across the change column, "Ch," to call attention to it; the other entries in that column call attention as before to weights which have suffered more than 2% of change, and the broken ones are marked B. The numbering

of the weights is continuous from last year's catalogue, so that in future the number alone will suffice to refer to any weight published in these works. The types of form are also numbered the same as last year; only as several between 50 and 100 were not required for reference, this year I have substituted for them on pl. xlvii. the new forms over 100, which are referred to in the present catalogue, and only those numbers appear on that plate to which I need to refer. In defining the materials of the weights it is necessary to use terms with a meaning more general than in a severely geological system; the subject, indeed, of Egyptian geology and mineralogy may be well studied on such a collection, but that was far from my present object, and as few names have been used as would suffice to mark the most distinct groups of materials. To avoid misunderstanding, it will be as well to give general definitions of the use made of these terms, as follows:—

Basalt: a fine-grained uniform silicate, black, green, grey, or brown, with earthy fracture, except in the brown which is sub-crystalline. **Syenite:** quartz, hornblende, and felspar, quartz always scarce, sometimes invisible; varying from coarse grain to a microscopic magma. **Granite:** quartz, mica, and felspar or hornblende. **Diorite:** felspar and hornblende, including all hard mixed magnesian silicates. **Serpentine:** all soft magnesian silicates. **Gneiss:** "any hard quartzose semi-crystalline schistose rock," according to the "very vague" but convenient definition mentioned by Geikie. **Porphyry:** a lighter hard silicate dispersed in a darker hard silicate, and not hornblendic. **Silicate:** any homogenous hard silicate of undetermined nature. The hæmatite, it should be noted, is almost always very rough, and coarse brown, often a mere pebble or nodule ground on one side; thus quite unlike the exquisite polished weights of black hæmatite from Syria.

NAUKRATIS. II.
EGYPTIAN KAT STANDARD (107).

| No. | Material. | Form. | Present. | Ch. | Ancient. | x | Unit. |
|-----|----------------|---------|----------|-----|----------|---------------|-------|
| 517 | Basalt, bk. | 40 | 5597 | B | 6900 | 50 | 138 |
| 518 | Gneiss, gr. | 38—43 | 690 | | 690 | $\frac{1}{2}$ | 138.0 |
| 519 | Limestone, wt. | 44 | 689.9 | | 690.6 | $\frac{1}{5}$ | 138.1 |
| 520 | Gneiss, gr. | 42—43 | 46.1 | | 46.1 | $\frac{1}{3}$ | 138.3 |
| 521 | Alabaster | 33—37 | 1371.5 | | 1384 | 10 | 138.4 |
| 522 | Porphyry, red | 10—54 | 2764.4 | | 2768 | 20 | 138.4 |
| 523 | Syenite, gr. | 27—33 | 27,570 | | 27,750 | 200 | 138.7 |
| 524 | Limestone | 106 | 693.0 | | 693.5 | 5 | 138.7 |
| 525 | Bronze | 26 | 38.6 | 3.9 | 34.7 | $\frac{1}{4}$ | 138.8 |
| 526 | Basalt, bk. | 39 | 1389.0 | | 1389.5 | 10 | 138.9 |
| 527 | Bronze | 26—33 | 131.2 | 8 | 139 | 1 | 139 |
| 528 | Basalt, bk. | 26—27 | 139.0 | | 139.0 | 1 | 139.0 |
| 529 | Gneiss, gr. | 43 | 69.7 | | 69.7 | $\frac{1}{2}$ | 139.4 |
| 530 | Syenite, red | 25 | 2785.8 | | 2789 | 20 | 139.4 |
| 531 | Limestone, gr. | 36 | 46.5 | | 46.5 | $\frac{1}{3}$ | 139.5 |
| 532 | Limestone | 33—40 | 139.6 | | 139.6 | 1 | 139.6 |
| 533 | Gneiss, gr. | 3—54 | 3490.5 | | 3500 | 25 | 140.0 |
| 534 | Basalt, bk. | 40 | 7010 | | 7010 | 50 | 140.2 |
| 535 | Basalt, bk. | 37—39 | 6989 | | 7010 | 50 | 140.2 |
| 536 | Syenite, gr. | 27—40 | 700.9 | | 700.9 | 5 | 140.2 |
| 537 | Limestone, wt. | 38—39 | 2806.0 | | 2806 | 20 | 140.3 |
| 538 | Basalt, br. | 27—40 | 1400.8 | | 1403.0 | 10 | 140.3 |
| 539 | Quartz, bk. | 84 | 280.9 | | 280.9 | 2 | 140.4 |
| 540 | Basalt, br. | 26—27 | 700.9 | | 702.4 | 5 | 140.5 |
| 541 | Syenite, gr. | 7—16 | 2803.9 | | 2814 | 20 | 140.7 |
| 542 | Basalt, br. | 23—33 | 2815.6 | | 2816 | 20 | 140.8 |
| 543 | Basalt, br. | 44 | 705.2 | | 705.2 | 5 | 141.0 |
| 544 | Basalt, br. | 17—18 | 141.2 | | 141.2 | 1 | 141.2 |
| 545 | Basalt, br. | 40 | 7009 | | 7060 | 50 | 141.2 |
| 546 | Syenite, bk. | 38 | 2824.2 | | 2826 | 20 | 141.3 |
| 547 | Basalt, br. | 19 | 1404.0 | | 1415 | 10 | 141.5 |
| 548 | Sandstone, red | 12—23 | 1415.8 | | 1416 | 10 | 141.6 |
| 549 | Basalt, bk. | 43 | 283.7 | | 283.7 | 2 | 141.8 |
| 550 | Basalt, bk. | 38 | 283.9 | | 283.9 | 2 | 141.9 |
| 551 | Marble, wt. | 15 | 71.0 | | 71.0 | $\frac{1}{2}$ | 142.0 |
| 552 | Limestone, bk. | 84 | 47.5 | | 47.5 | $\frac{1}{2}$ | 142.5 |
| 553 | Limestone, wt. | 27—38 | 1424.3 | | 1425.6 | 10 | 142.6 |
| 554 | Syenite, bk. | 38 | 7135 | | 7135 | 50 | 142.7 |
| 555 | Basalt, bk. | 33 | 14,280 | | 14,280 | 100 | 142.8 |
| 556 | Bronze | 16 | 39.7 | 4 | 35.7 | $\frac{1}{4}$ | 142.8 |
| 557 | Basalt, br. | 25—27 | 1425.1 | | 1429 | 10 | 142.9 |
| 558 | Basalt, br. | 23—33 | 285.8 | | 285.8 | 2 | 142.9 |
| 559 | Lead | 16 oval | 297.8 | 12 | 286 | 2 | 143 |
| 560 | Basalt, bk. | 4—54 | 2862.4 | | 2862.4 | 20 | 143.1 |
| 561 | Basalt, bk. | 33 | 286.7 | | 286.7 | 2 | 143.3 |
| 562 | Basalt, br. | 23 | 28,680 | | 28,700 | 200 | 143.5 |
| 563 | Basalt, br. | 27—33 | 287.0 | | 287.0 | 2 | 143.5 |
| 564 | Lead | 124 | 7206.5 | | 7188 | 50 | 143.8 |
| 565 | Syenite, bk. | 10—54 | 2880.0 | | 2880.0 | 20 | 144.0 |
| 566 | Sandstone | 33—37 | 72,030 | | 72,030 | 500 | 144.0 |
| 567 | Basalt, bk. | 19 | 1440.9 | | 1441 | 10 | 144.1 |
| 568 | Basalt, br. | 33—40 | 1441.1 | | 1444 | 10 | 144.4 |
| 569 | Basalt, gn. | 41—43 | 72.2 | | 72.2 | $\frac{1}{2}$ | 144.4 |
| 570 | Basalt, bk. | 31—37 | 288.8 | | 288.8 | 2 | 144.4 |
| 571 | Bronze | 38—40 | 295.8 | 7 | 289 | 2 | 144.5 |
| 572 | Diorite, bk. | 26—33 | 48.3 | | 48.3 | $\frac{1}{3}$ | 144.9 |
| 573 | Basalt, bk. | 26—27 | 289.9 | | 289.9 | 2 | 144.9 |
| 574 | Basalt, bk. | 33 | 144.9 | | 144.9 | 1 | 144.9 |
| 575 | Basalt, bk. | 27—33 | 290.3 | | 290.3 | 2 | 145.1 |
| 576 | Limestone, gr. | 80—81 | 24.2 | — | 24.2 | $\frac{1}{3}$ | 145.2 |
| 577 | Syenite, bk. | 56 | 1442.8 | | 1453 | 10 | 145.3 |
| 578 | Basalt, bk. | 26 | 290.7 | | 290.7 | 2 | 145.3 |
| 579 | Limestone, br. | 20—40 | 727.4 | | 727.4 | 5 | 145.5 |
| 580 | Syenite, bk. | 54 | 2913.0 | | 2913.0 | 20 | 145.6 |
| 581 | Basalt, br. | 33—40 | 2906.0 | | 2913 | 20 | 145.6 |
| 582 | Basalt, br. | 25—27 | 1456.6 | | 1456.6 | 10 | 145.7 |
| 583 | Syenite, gr. | 33 | 291.4 | | 291.4 | 2 | 145.7 |
| 584 | Silicate, br. | 38 | 145.7 | | 145.7 | 1 | 145.7 |
| 585 | Limestone, wt. | 37—38 | 291.9 | | 291.8 | 2 | 145.9 |
| 586 | Limestone, gr. | 28—31 | 146.2 | | 146.2 | 1 | 146.2 |

| No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. | No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. |
|--------------------------------|----------------|-------|----------|-----|----------|---------------|-------|------------------------------|-----------------|--------|----------|-----|----------|---------------|-------|
| 587 | Basalt, br. | 26—33 | 1464.0 | | 1464.4 | 10 | 146.4 | 658 | Lead | 81 | 35.7 | 8.6 | 31.3 | | 125.2 |
| 588 | Sandstone, br. | 37—40 | 2928.3 | | 2932 | 20 | 146.6 | 659 | Bronze | 33—37 | 627.6 | | 627 | 5 | 125.4 |
| 589 | Basalt, bk. | 11—43 | 293.5 | | 293.5 | 2 | 146.7 | 660 | Bronze | 33—34 | 385.7 | 9 | 377 | 3 | 125.7 |
| 590 | Bronze | 26 | 39.4 | 2.7 | 36.7 | $\frac{1}{4}$ | 146.8 | 661 | Syenite, bk. | 10—54 | 3774.3 | | 3774.3 | 30 | 125.8 |
| 591 | Basalt, bk. | 38 | 49.0 | | 49.0 | $\frac{1}{2}$ | 147.0 | 662 | Bronze | 26—46 | 126.1 | | 125.8 | 1 | 125.8 |
| 592 | Basalt, br. | 37—38 | 737.9 | | 738.0 | $\frac{1}{5}$ | 147.6 | 663 | Limestone, wt. | 11—44 | 226.1 | 26 | 252 | 2 | 126 |
| 593 | Limestone, wt. | 38—43 | 738.5 | | 738.6 | 5 | 147.7 | 664 | Gneiss, gr. | 54 | 3780.0 | | 3782 | 30 | 126.1 |
| 594 | Syenite, bk. | 37 | 1447.7 | | 1447.7 | 10 | 147.8 | 665 | Serpentine | 38 | 504.8 | | 504.8 | 4 | 126.2 |
| 595 | Bronze | 105 | 745.9 | | 739 | 5 | 147.8 | 666 | Basalt, br. | 11 | 1262.8 | | 1262.8 | 10 | 126.3 |
| 596 | Basalt, br. | 38 | 1479.3 | | 1479.3 | 10 | 147.9 | 667 | Basalt, bk. | 11—83 | 2529.5 | | 2529.5 | 20 | 126.4 |
| 597 | Limestone | 30—31 | 1476.8 | | 1480 | 10 | 148.0 | 668 | Basalt, bk. | 38—39 | 758.7 | | 758.7 | 6 | 126.4 |
| 598 | Glass, dark | 40—44 | 71.8 | 2.2 | 74 | $\frac{1}{2}$ | 148 | 669 | Bronze | 32—36 | 65.6 | 2.4 | 63.2 | $\frac{1}{2}$ | 126.4 |
| 599 | Basalt, bk. | 33 | 296.3 | | 296.3 | 2 | 148.1 | 670 | Bronze | 26—27 | 66.1 | 2.8 | 63.3 | $\frac{1}{2}$ | 126.6 |
| 600 | Basalt, bk. | 20—40 | 5866.6 | | 5930 | 40 | 148.2 | 671 | Syenite, gr. | 18—26 | 3804.1 | | 3809 | 30 | 126.9 |
| 601 | Basalt, br. | 19—27 | 74.1 | | 74.1 | $\frac{1}{2}$ | 148.2 | 672 | Basalt, br. | 44 | 1522.9 | | 1523 | 12 | 126.9 |
| 602 | Basalt, br. | 12—26 | 1479.8 | | 1484 | 10 | 148.4 | 673 | Basalt, br. | 33 | 761.2 | | 761.2 | 6 | 126.9 |
| 603 | Basalt, bk. | 38—43 | 296.9 | | 296.9 | 2 | 148.4 | 674 | Alabaster | 53 | 1195.3 | 75 | 1270 | 10 | 127.0 |
| 604 | Basalt, bk. | 33 | 297.6 | | 297.6 | 2 | 148.8 | 675 | Limestone, wt. | 46—47 | 1480.7 | 44 | 1525 | 12 | 127.1 |
| 605 | Basalt, bk. | 5—43 | 2976.4 | | 2976.4 | 20 | 148.8 | 676 | Limestone, yel. | 38—43 | 635.5 | | 635.5 | 5 | 127.1 |
| 606 | Pottery, brown | 41 | 1487.7 | | 1488 | 10 | 148.8 | 677 | Alabaster | 25—40 | 635.4 | | 636 | 5 | 127.2 |
| 607 | Basalt, gr. | 10—35 | 2981.6 | | 2983 | 20 | 149.1 | 678 | Basalt, br. | 38—40 | 127.2 | | 127.2 | 1 | 127.2 |
| 608 | Limestone | 112 | 1494.7 | | 1495 | 10 | 149.5 | 679 | Hæmatite, bk. | 11 | 3718.0 | | 3718.0 | 30 | 127.3 |
| 609 | Lead | 65 | 319.1 | 19 | 300 | 2 | 150 | 680 | Limestone, wt. | 1 | 1261.7 | | 1274 | 10 | 127.4 |
| 610 | Syenite, gr. | 33 | 300.3 | | 300.3 | 2 | 150.1 | 681 | Limestone, br. | 11—19 | 639.0 | | 639.0 | 5 | 127.8 |
| 611 | Basalt, bk. | 10—54 | 3010.6 | | 3010.6 | 20 | 150.5 | 682 | Basalt, bk. | 18 | 1278.8 | | 1279 | 10 | 127.9 |
| 612 | Basalt, br. | 27—33 | 753.0 | | 753.0 | 5 | 150.6 | 683 | Basalt, br. | 25—40 | 765.4 | | 767.8 | 6 | 127.9 |
| 613 | Basalt, br. | 33 | 1506.6 | | 1506.6 | 10 | 150.7 | 684 | Syenite, bk. | 33 | 1535.1 | | 1536.2 | 12 | 128.0 |
| 614 | Basalt, br. | 33 | 301.4 | | 301.4 | 2 | 150.7 | 685 | Basalt, bk. | 18—27 | 128.0 | | 128.0 | 1 | 128.0 |
| 615 | Limestone, gr. | 84 | 75.4 | | 75.4 | $\frac{1}{2}$ | 150.8 | 686 | Syenite, gr. | 2—55 | 2562.2 | | 2562.2 | 20 | 128.1 |
| 616 | Basalt, br. | 26—33 | 151.3 | | 151.3 | 1 | 151.3 | 687 | Bronze | 33—37 | 650.7 | | 642 | 5 | 128.4 |
| 617 | Bronze | 17—25 | 41.4 | 3.5 | 37.9 | $\frac{1}{4}$ | 151.6 | 688 | Syenite, bk. | 54 | 1927.2 | | 1927.5 | 15 | 128.5 |
| 618 | Quartz, bk. | 11—13 | 303.8 | | 303.8 | 2 | 151.9 | 689 | Basalt, br. | 8—9 | 1285.4 | | 1285.4 | 10 | 128.5 |
| 619 | Bronze | 12 | 29.0 | 6 | 25.4 | $\frac{1}{2}$ | 152.4 | 690 | Bronze | 25 | 129.0 | | 128.5 | 1 | 128.5 |
| 620 | Syenite, br. | 54 | 3062.7 | | 3065 | 20 | 153.2 | 691 | Limestone | 11—36 | 1284.6 | | 1286.0 | 10 | 128.6 |
| 621 | Syenite, bk. | 44 | 307.5 | | 307.5 | 2 | 153.7 | 692 | Basalt, bk. | 23—38 | 2574.5 | | 2574.5 | 20 | 128.7 |
| 622 | Basalt, bk. | 33 | 77.4 | | 77.4 | $\frac{1}{2}$ | 154.8 | 693 | Syenite, bk. | 58—86 | 1932.4 | | 1932.4 | 15 | 128.8 |
| 623 | Basalt, bk. | —33 | 2228.8 | B | 3100 | 20 | 155 | 694 | Bronze | 33—36 | 766.1 | | 774 | 6 | 129.0 |
| ASSYRIAN SHEKEL STANDARD (90). | | | | | | | | 695 | Basalt, br. | 38—39 | 3097.3 | | 3098 | 24 | 129.1 |
| 624 | Basalt, bk. | 26 | 19.6 | — | 19.6 | $\frac{1}{8}$ | 117.6 | 696 | Porphyry, bk. | 10—54 | 3881.7 | | 3881.7 | 30 | 129.4 |
| 625 | Alabaster | 107 | 19.6 | — | 19.6 | $\frac{1}{8}$ | 117.6 | 697 | Basalt, bk. | 40 | 647.6 | | 647.6 | 5 | 129.5 |
| 626 | Bronze | 37 | 374.1 | 20 | 354.2 | 3 | 118 | 698 | Syenite, bk. | 55 | 2595.9 | | 2595.9 | 20 | 129.8 |
| 627 | Serpentine | 11—13 | 59.2 | | 59.2 | $\frac{1}{2}$ | 118.4 | 699 | Limestone | 19—29 | 129.1 | | 129.8 | 1 | 129.8 |
| 628 | Bronze | 38—43 | 33.9 | 4.3 | 29.6 | $\frac{1}{4}$ | 118.4 | 700 | Bronze | 27 | 136.2 | 6.4 | 129.8 | 1 | 129.8 |
| 629 | Bronze | 26—33 | 61.5 | 2.1 | 59.4 | $\frac{1}{2}$ | 118.8 | 701 | Bronze | 26 | 46.5 | 3.2 | 43.3 | $\frac{1}{2}$ | 129.9 |
| 630 | Bronze | 37—38 | 61.1 | 1.6 | 59.5 | $\frac{1}{2}$ | 119 | 702 | Bronze | 14—21 | 45.6 | 2.3 | 43.3 | $\frac{1}{2}$ | 129.9 |
| 631 | Limestone, wt. | 38—41 | 353.8 | | 360 | 3 | 120 | 703 | Bronze | 20—33 | 666.7 | | 650 | 5 | 130 |
| 632 | Bronze, L. ? | 26 | 246.6 | 6.6 | 240 | 2 | 120 | 704 | Basalt, bk. | 40 | 773.1 | | 7800 | 60 | 130.0 |
| 633 | Bronze | 26 | 245.0 | | 240 | 2 | 120 | 705 | Bronze | 67 | 6475.2 | | 6510 | 50 | 130.2 |
| 634 | Bronze | 27 | 34.6 | 26 | 60 | $\frac{1}{2}$ | 120 | 706 | Serpentine | ball | 260.4 | | 260.4 | 2 | 130.2 |
| 635 | Bronze | 27—33 | 594.8 | | 604 | 5 | 120.8 | 707 | Basalt, bk. | 20—26 | 1303.5 | | 1303.5 | 10 | 130.3 |
| 636 | Bronze | 26—33 | 125.0 | 4.2 | 120.8 | 1 | 120.8 | 708 | Basalt, br. | 38 | 2608.5 | | 2610 | 20 | 130.5 |
| 637 | Bronze | 12—25 | 387.5 | 24 | 363 | 3 | 121 | 709 | Bronze | 62 | 133.3 | | 130.5 | 1 | 130.5 |
| 638 | Bronze | 58 | 131.1 | 10 | 121.0 | 1 | 121.0 | 710 | Basalt, bk. | 25—40 | 261.4 | | 261.4 | 2 | 130.7 |
| 639 | Bronze | 26 | 134.2 | 12 | 122.0 | 1 | 122.0 | 711 | Bronze | 26—36 | 138.6 | 7.9 | 130.7 | 1 | 130.7 |
| 640 | Bronze | 33—36 | 119.2 | 3 | 122 | 1 | 122 | 712 | Basalt, bk. | 33 | 785.9 | | 786.2 | 6 | 131.0 |
| 641 | Bronze | 33—36 | 34.2 | 3.7 | 30.5 | $\frac{1}{4}$ | 122.0 | 713 | Bronze | 33—39 | 269.7 | 7.7 | 262 | 2 | 131 |
| 642 | Bronze | 33—36 | 254.7 | 10 | 245 | 2 | 122.5 | ATTIC DRACHMA STANDARD (54). | | | | | | | |
| 643 | Limestone, br. | 79 | 122.6 | | 122.6 | 1 | 122.6 | 714 | Bronze, L. | 26—33 | 823.2 | B | 1300? | 20 | 65 |
| 644 | Limestone | 110 | 61.7 | | 61.4 | $\frac{1}{2}$ | 122.8 | 715 | Limestone | 60 | 3258.8 | | 3259 | 50 | 65.18 |
| 645 | Bronze | 26 | 32.8 | 2.1 | 30.7 | $\frac{1}{4}$ | 122.8 | 716 | Basalt, br. | 37—38 | 1301.7 | | 1305 | 20 | 65.25 |
| 646 | Bronze | 33—37 | 400.5 | 30 | 370 | 3 | 123 | 717 | Syenite, gr. | 23—25 | 13,050 | | 13,080 | 200 | 65.40 |
| 647 | Bronze | 25 | 41.9 | 9 | 41.0 | $\frac{1}{2}$ | 123 | 718 | Basalt, bk. | low 37 | 130,700 | | 130,900 | 2000 | 65.45 |
| 648 | Basalt, br. | 40 | 2460.2 | | 2462 | 20 | 123.1 | 719 | Bronze | 25 | 1327.8 | | 1310 | 20 | 65.5 |
| 649 | Alabaster | 37—40 | 1228.4 | | 1231 | 10 | 123.1 | 720 | Basalt, br. | 38 | 1309.7 | | 1311.0 | 20 | 65.55 |
| 650 | Alabaster | 31—32 | 123.2 | | 123.2 | 1 | 123.2 | 721 | Bronze | 33—37 | 670.6 | 13 | 658 | 10 | 65.8 |
| 651 | Bronze | 33 | 41.0 | 4.5 | 41.1 | $\frac{1}{2}$ | 123.3 | 722 | Syenite, bk. | low 37 | 263.4 | | 263.4 | 4 | 65.8 |
| 652 | Limestone | 11—40 | 1229.5 | | 1240 | 10 | 124.0 | 723 | Basalt, br. | 20 | 131.7 | | 131.7 | 2 | 65.8 |
| 653 | Bronze | 32—34 | 126.3 | 16 | 124 | 1 | 124 | 724 | Basalt, br. | 11—38 | 1318.6 | | 1318.6 | 20 | 65.93 |
| 654 | Serpentine | 24—27 | 41.6 | | 41.6 | $\frac{1}{2}$ | 124.2 | 725 | Shelly deposit | 2—3 | 13,190 | | 13,200 | 200 | 66.0 |
| 655 | Syenite, bk. | 10 | 3730.8 | | 3730.8 | 30 | 124.3 | 726 | Basalt, br. | 19—33 | 3288.2 | | 3300 | 50 | 66.0 |
| 656 | Basalt, br. | 104 | 3695.0 | | 3740 | 30 | 124.7 | 727 | Bronze | 104 | 1368.3 | 48 | 1320 | 20 | 66.0 |
| 657 | Basalt, bk. | 55 | 1873.9 | | 1873.9 | 15 | 124.9 | 728 | Basalt, bk. | 117 | 3292 | 5 | 3301 | 50 | 66.02 |

| No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. | No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. |
|-----------------------------|----------------|-------|----------|-----|----------|-----|-------|-----|---------------|---------|----------|-----|----------|-----|-------|
| 729 | Limestone | 19—33 | 3302·3 | | 3303 | 50 | 66·06 | 797 | Syenite, gr. | 10 | 4437·9 | | 4437·9 | 20 | 221·9 |
| 730 | Bronze | 58—59 | 554·7 | 26· | 529· | 8 | 66·1 | 798 | Basalt, br. | 14—19 | 5503·5 | | 5560 | 25 | 222·4 |
| 731 | Basalt, bk. | 79 | 1321·5 | | 1322·3 | 20 | 66·11 | 799 | Gneiss, gr. | 38—40 | 1776·9 | | 1777·5 | 8 | 222·7 |
| 732 | Basalt, br. | 11—36 | 3297·3 | | 3309 | 50 | 66·18 | 800 | Bronze | 20—26 | 60·4 | 4·7 | 55·7 | 1 | 223 |
| 733 | Basalt, br. | 33 | 1319·2 | | 1323·6 | 20 | 66·18 | 801 | Gneiss, bk. | 13 | 5581·8 | | 5582 | 25 | 223·3 |
| 734 | Basalt, br. | 18 | 662·0 | | 662·0 | 10 | 66·20 | 802 | Lead | 62—86 | 1158·2 | 80 | 1120 | 5 | 224 |
| 735 | Bronze | 33—37 | 669·2 | | 662· | 10 | 66·2 | 803 | Bronze | 26 | 239·5 | 15· | 224 | 1 | 224 |
| 736 | Bronze, L. | 26 | 1345·7 | | 1328 | 20 | 66·4 | 804 | Basalt, br. | 14 | 2250·0 | | 2250·2 | 10 | 225·0 |
| 737 | Bronze | 33—37 | 129·2 | 4· | 133 | 2 | 66·5 | 805 | Bronze | 25 | 126·1 | 14· | 112·5 | 1 | 225· |
| 738 | Bronze | 26—33 | 38·3 | 5· | 33·3 | 1 | 66·6 | 806 | Bronze | 26—36 | 119·3 | 6· | 113·0 | 1 | 226·0 |
| 739 | Limestone | 102 | 1332·0 | | 1332·5 | 20 | 66·62 | 807 | Bronze | 26—36 | 59·9 | 3·4 | 56·5 | 1 | 226· |
| 740 | Basalt, br. | 23—40 | 665·7 | | 667· | 10 | 66·7 | 808 | Bronze | 121 | 20·8 | 1·9 | 18·9 | 1 | 227 |
| 741 | Syenite, gr. | 38 | 666·9 | | 667·0 | 10 | 66·7 | 809 | Bronze | 26 | 20·6 | 1·6 | 19·0 | 1 | 228· |
| 742 | Bronze | 33—37 | 70·5 | 3·8 | 66·7 | 1 | 66·7 | 810 | Bronze | 67 | 244·9 | 16· | 229 | 1 | 229 |
| 743 | Basalt, bk. | 23—40 | 667·3 | | 667·3 | 10 | 66·73 | 811 | Bronze | 33 | 239·2 | 9· | 230 | 1 | 230 |
| 744 | Basalt, br. | 37—39 | 660·4 | | 6680 | 100 | 66·8 | 812 | Bronze | 25 | 59·3 | 1·8 | 57·5 | 1 | 230 |
| 745 | Syenite, bk. | 38 | 267·1 | | 267·1 | 4 | 66·8 | 813 | Bronze | 20, 120 | 117·1 | | 115·1 | 1 | 230·2 |
| 746 | Jasper, bk. | 14—17 | 33·4 | | 33·4 | 1 | 66·8 | 814 | Bronze | 25, 120 | 114·5 | 3 | 115·5 | 1 | 231 |
| 747 | Bronze | 33 | 545·3 | 60 | 535 | 8 | 66·9 | 815 | Bronze | 40, 120 | 60·1 | 2·3 | 57·8 | 1 | 231 |
| 748 | Basalt, bk. | 27 | 133·8 | | 133·8 | 2 | 66·9 | 816 | Basalt, gn. | 55 | 1156·6 | | 1156·6 | 5 | 231·3 |
| 749 | Limestone, br. | 36 | 67·1 | | 67·1 | 1 | 67·1 | 817 | Basalt, br. | 12 | 1158·4 | | 1158·4 | 5 | 231·7 |
| 750 | Gneiss, gr. | 55 | 3357·8 | | 3357·8 | 50 | 67·15 | 818 | Bronze | 25 | 59·7 | 1·7 | 58·0 | 1 | 232 |
| 751 | Syenite, gr. | 33 | 2674·7 | | 2688· | 40 | 67·2 | 819 | Steatite, gr. | 36 | 116·2 | | 116·2 | 1 | 232·4 |
| 752 | Basalt, bk. | 37—38 | 134·5 | | 134·5 | 2 | 67·2 | 820 | Bronze | 36—37 | 257·0 | 24· | 235 | 1 | 235 |
| 753 | Basalt, bk. | 33—40 | 67·2 | | 67·2 | 1 | 67·2 | 821 | Syenite, gr. | 33 | 59·0 | | 59·0 | 1 | 236 |
| 754 | Basalt, br. | 20—40 | 1332·0 | | 1345 | 20 | 67·25 | 822 | Basalt, bk. | 55 | 1193·4 | | 1195·0 | 5 | 239·0 |
| 755 | Syenite, gr. | 26 | 13440 | | 13470 | 200 | 67·35 | | | | | | | | |
| 756 | Basalt, br. | 39—40 | 1349·1 | | 1349·1 | 20 | 67·45 | | | | | | | | |
| 757 | Alabaster | 10 | 254·4 | 17· | 271 | 4 | 67·75 | | | | | | | | |
| 758 | Basalt, br. | 19—40 | 2719·3 | | 2720 | 40 | 68·0 | 823 | Bronze | 37 | 177·3 | 28 | 155 | 2 | 77·5 |
| 759 | Bronze | 33 | 670·2 | | 681· | 10 | 68·1 | 824 | Syenite, gr. | 10—54 | 3111·3 | | 3111·5 | 40 | 77·8 |
| 760 | Basalt, bk. | 40 | 2727·1 | | 2728 | 40 | 68·2 | 825 | Gneiss, bk. | 10—54 | 3910·3 | | 3912· | 40 | 78·2 |
| 761 | Basalt, bk. | 38 | 136·4 | | 136·4 | 2 | 68·2 | 826 | Gneiss, bk. | 19—39 | 6249 | | 6295 | 80 | 78·7 |
| 762 | Basalt, bk. | 33 | 1364·5 | | 1365·5 | 20 | 68·27 | 827 | Sandstone | 21—41 | 31,470 | | 31,470 | 400 | 78·8 |
| 763 | Basalt, bk. | 44—45 | 137·3 | | 137·3 | 2 | 68·6 | 828 | Bronze | 33 | 168·1 | 10 | 158·0 | 2 | 79·0 |
| 764 | Syenite, gr. | 11—38 | 1371·3 | | 1374· | 20 | 68·7 | 829 | Basalt, br. | 37—40 | 3150·8 | | 3163· | 40 | 79·1 |
| 765 | Basalt, bk. | 10—38 | 6867· | | 6871 | 100 | 68·71 | 830 | Sandstone | 54 | 1979·3 | | 1980 | 25 | 79·2 |
| 766 | Alabaster | 26 | 137·6 | | 137·6 | 2 | 68·8 | 831 | Basalt, bk. | 38—39 | 6343· | | 6347· | 80 | 79·3 |
| 767 | Limestone | 19—38 | 11·9 | — | 11·9 | 1 | 71·4 | 832 | Syenite, br. | 113 | 1587·1 | | 1587·1 | 20 | 79·3 |
| | | | | | | | | 833 | Basalt, br. | 40 | 6348 | | 6352 | 80 | 79·4 |
| | | | | | | | | 834 | Syenite, bk. | 2—54 | 3200·3 | | 3200·2 | 40 | 80·0 |
| | | | | | | | | 835 | Basalt, br. | 33 | 3191·6 | | 3210 | 40 | 80·2 |
| | | | | | | | | 836 | Syenite, bk. | 9—10 | 3221·4 | | 3221·4 | 40 | 80·5 |
| | | | | | | | | 837 | Basalt, bk. | 79 | 322·7 | | 322·7 | 4 | 80·7 |
| | | | | | | | | 838 | Basalt, br. | 33 | 813·1 | | 813·4 | 10 | 81·3 |
| | | | | | | | | 839 | Limestone | 38 | 3254·3 | | 3258 | 40 | 81·4 |
| | | | | | | | | 840 | Alabaster | 13—16 | 1608·2 | | 1630 | 20 | 81·5 |
| | | | | | | | | 841 | Basalt, br. | 11—43 | 408·1 | | 408·1 | 5 | 81·6 |
| | | | | | | | | 842 | Limestone | 12—14 | 163·5 | | 163·5 | 2 | 81·7 |
| | | | | | | | | 843 | Gneiss, bk. | 114 | 3270·7 | | 3270·7 | 40 | 81·8 |
| | | | | | | | | 844 | Porphyry | 10 | 4095·2 | | 4095·2 | 50 | 81·9 |
| | | | | | | | | 845 | Basalt, bk. | 79 | 822·3 | | 822·3 | 10 | 82·2 |
| | | | | | | | | 846 | Limestone | 7 | 329·4 | | 329 | 4 | 82·2 |
| EIGHTY GRAIN STANDARD (24). | | | | | | | | | | | | | | | |
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| No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. | No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. |
|--------------------------------|-------------------|---------|----------|-----|----------|----------------|-------|-----|-------------------|---------|----------|-----|----------|----------------|-------|
| 860 | Bronze | 72—74 | 438·0 | | 444 | 10 | 44·4 | 909 | Basalt, gr. | 33 | 275·0 | | 275·0 | 2 | 137·5 |
| 861 | Bronze | 73 | 891·9 | | 894 | 20 | 44·7 | 910 | Syenite, bk. | 20—33 | 13·75 | — | 13·75 | $\frac{1}{10}$ | 137·5 |
| 862 | Bronze | 72 | 223·9 | | 225 | 5 | 45·0 | 911 | Diorite, gr. | 26—27 | 34·4 | — | 34·4 | $\frac{1}{4}$ | 137·6 |
| 863 | Bronze | 72—73 | 448·8 | | 452 | 10 | 45·2 | 912 | Sandstone, br. | 15 | 1372·6 | | 1378 | 10 | 137·8 |
| 864 | Bronze | 72 | 451·0 | | 453 | 10 | 45·3 | 913 | Basalt, bk. | 42—44 | 22·9 | — | 23·0 | $\frac{1}{10}$ | 138·0 |
| 865 | Bronze | 72 | 449·0 | | 454 | 10 | 45·4 | 914 | Hæmatite | 2—8 | 34·5 | — | 34·5 | $\frac{1}{10}$ | 138·0 |
| 866 | Bronze | 72—73 | 452·8 | | 456 | 10 | 45·6 | 915 | Diorite, bk. | 63—84 | 137·7 | | 138·0 | 1 | 138·0 |
| UNCERTAIN STANDARDS (8). | | | | | | | | 916 | Basalt, br. | 36—43 | 134·3 | 4 | 138·0 | 1 | 138·0 |
| 867 | Silicate, bk. | 16 | 89·1 | | 89·1 | | | 917 | Basalt, br. | 33 | 264·5 | 12 | 276 | 2 | 138 |
| 868 | Basalt, bk. | 18 | 350·3 | | 350·3 | | | 918 | Syenite, bk., wt. | 15—16 | 23·05 | — | 23·05 | $\frac{1}{10}$ | 138·3 |
| 869 | Pottery, br. | 41—45 | 1791·3 | | 1796 | | | 919 | Alabaster | 21—35 | 69·1 | | 69·2 | | 138·4 |
| 870 | Porphyry | 11—54 | 3559·5 | | 3559·5 | | | 920 | Alabaster | 38 | 1381·7 | | 1381 | 10 | 138·4 |
| 871 | Diorite, bk. | 11—54 | 3595·2 | | 3595·2 | | | 921 | Limestone, wt. | 64—66 | 22·8 | — | 23·1 | $\frac{1}{10}$ | 138·6 |
| 872 | Syenite, bk. | 11—54 | 3645·5 | | 3645·5 | | | 922 | Hæmatite | 5—46 | 46·2 | | 46·2 | $\frac{1}{10}$ | 138·6 |
| 873 | Syenite, bk. | 8—54 | 4144·1 | | 4144·1 | | | 923 | Basalt, br. | 4—21 | 46·2 | | 46·2 | $\frac{1}{10}$ | 138·7 |
| 874 | Silicate, br. | 3—16 | 10,455· | | 10,455· | | | 924 | Basalt, br. | 11—40 | 69·4 | | 69·4 | $\frac{1}{10}$ | 138·8 |
| NEBESHEH. | | | | | | | | 925 | Basalt, bk. | 27—33 | 137·9 | | 138·8 | 1 | 138·8 |
| EGYPTIAN KAT STANDARD (11). | | | | | | | | 926 | Syenite, gr., wt. | 33 | 138·8 | | 138·8 | 1 | 138·8 |
| 875 | Alabaster | 43—79 | 13·9 | — | 13·9 | $\frac{1}{10}$ | 139· | 927 | Basalt, bk. | 38—43 | 1388·4 | | 1389·3 | 10 | 138·9 |
| 876 | Basalt, bk. | 33—40 | 279·2 | | 279·2 | 2 | 139·6 | 928 | Basalt, gn. | 33 | 11·6 | — | 11·6 | $\frac{1}{12}$ | 139·2 |
| 877 | Basalt, bk. | 20—33 | 2876·6 | | 2879 | 20 | 143·9 | 929 | Bone | 42 | 10·6 | — | 11·6 | $\frac{1}{12}$ | 139·2 |
| 878 | Basalt, bk. | 7—19 | 722·1 | | 722·1 | 5 | 144·4 | 930 | Silicate, br. | 16—17 | 23·2 | — | 23·2 | $\frac{1}{10}$ | 139·2 |
| 879 | Basalt | 33 | 72·2 | | 72·3 | $\frac{1}{2}$ | 144·6 | 931 | Diorite, bk. | 15—17 | 23·1 | — | 23·2 | $\frac{1}{10}$ | 139·2 |
| 880 | Basalt, bk. | 26—33 | 1489·4 | | 1490 | 10 | 149·0 | 932 | Diorite, bk. | 19—27 | 46·2 | | 46·4 | $\frac{1}{10}$ | 139·2 |
| 881 | Basalt, br. | 8—10 | 3018·6 | | 3019 | 20 | 150·9 | 933 | Syenite, bk., wt. | 20—33 | 23·1 | — | 23·3 | $\frac{1}{10}$ | 139·8 |
| 882 | Limestone | 119 | 727·6 | 32 | 760 | 5 | 152· | 934 | Silicate, bk. | 15—17 | 23·3 | — | 23·3 | $\frac{1}{10}$ | 139·8 |
| 883 | Lead | 103 | 1571·1 | 36 | 1535 | 10 | 153·5 | 935 | Alabaster | 4—19 | 46·4 | | 46·6 | $\frac{1}{10}$ | 139·8 |
| 884 | Basalt, bk. | 33 | 154·5 | | 154·6 | 1 | 154·8 | 936 | Basalt, bk. | 36 | 69·9 | | 69·9 | $\frac{1}{10}$ | 139·8 |
| 885 | Syenite, gr. | 33 | 151·8 | | 154·8 | 1 | 154·8 | 937 | Alabaster | 20—23 | 23·3 | — | 23·3 | $\frac{1}{10}$ | 140·0 |
| ASSYRIAN SHEKEL STANDARD (3). | | | | | | | | 938 | Basalt | 40 | 69·2 | | 70·0 | $\frac{1}{10}$ | 140·0 |
| 886 | Limestone | 41—45 | 476·9 | | 480 | 4 ? | 120 ? | 939 | Quartz, wt. | 5—16 | 70·0 | | 70·0 | $\frac{1}{10}$ | 140·0 |
| 887 | Limestone | 101 | 43,510 | | 43,520 | 360 | 120·9 | 940 | Gneiss, bk. | 43—44 | 136·1 | 4 | 140· | 1 | 140· |
| 888 | Granite | 33—34 | 1253·7 | | 1264 | 10 | 126·4 | 941 | Gabbro. bk. | 20—23 | 555·8 | B | 700 | 5 | 140· |
| ATTIC DRACHMA STANDARD (3). | | | | | | | | 942 | Basalt, br. | 33 | 892 | B | 1400 | 10 | 140· |
| 889 | Limestone, wt. | 23—27 | 26,630 | | 26,750 | 400 | 66·87 | 943 | Basalt, bk. | 14—39 | 1399·6 | | 1400·2 | 10 | 140·0 |
| 890 | Limestone, wt. | 80—82 | 6770 | | 6772 | 109 | 67·72 | 944 | Basalt, bk. | 19—20 | 1398·7 | | 1399·8 | 10 | 140·0 |
| 891 | Syenite, bk. | 3—10 | 2737·8 | | 2738 | 40 | 68·45 | 945 | Basalt, br. | 26 | 2364·7 | B | 2800 ? | 20 | 140 |
| PHENICIAN SHEKEL STANDARD (1). | | | | | | | | 946 | Basalt, bk. | 118 | 12,510 | B | 14,000 | 100 | 140 |
| 892 | Limestone | 12—40 | 426·7 | | 430 | 2 | 215· | 947 | Sandstone | 19 | 65,200 | B | 70,000 | 500 | 140 |
| EIGHTY GRAIN STANDARD (3). | | | | | | | | 948 | Limestone | 11—43 | 693·2 | | 701 | 5 | 140·2 |
| 893 | Limestone | thin 12 | 157·8 | | 157·8 | 2 | 78·9 | 949 | Limestone, wt. | 19—42 | 34·7 | — | 35·1 | $\frac{1}{4}$ | 140·4 |
| 894 | Basalt, bk. | 33 | 159·8 | | 159·8 | 2 | 79·9 | 950 | Hæmatite | rough | 140·4 | | 140·4 | 1 | 140·4 |
| 895 | Alabaster | 4—21 | 81·4 | | 81·4 | 1 | 81·4 | 951 | Steatite | 8 | 140·0 | | 140·5 | 1 | 140·5 |
| DEFENNEH. | | | | | | | | 952 | Gneiss, bk. | 33—40 | 6936 | | 7040 | 50 | 140·8 |
| EGYPTIAN KAT STANDARD (251). | | | | | | | | 953 | Basalt, br. | 20—33 | 704·5 | | 704·7 | 5 | 140·9 |
| 896 | Syenite, bk., wt. | 116 | 22·5 | — | 22·5 | $\frac{1}{10}$ | 135· | 954 | Syenite, bk. | 101 | 69·5 | | 70·5 | $\frac{1}{2}$ | 141·0 |
| 897 | Limestone, bard | 30—31 | 45·0 | | 45·0 | $\frac{1}{10}$ | 135·0 | 955 | Syenite, gr. | 38 | 265·8 | 16 | 282 | 2 | 141 |
| 898 | Serpentine, &c. | 26—36 | 45·0 | | 45·0 | $\frac{1}{10}$ | 135·0 | 956 | Basalt, bk. | 10—19 | 35·3 | — | 35·3 | $\frac{1}{4}$ | 141·2 |
| 899 | Diorite, bk. | 15 | 22·6 | — | 22·6 | $\frac{1}{10}$ | 135·6 | 957 | Basalt, gr. | 38 | 141·3 | | 141·3 | 1 | 141·3 |
| 900 | Basalt, bk. | 36 | 45·2 | | 45·2 | $\frac{1}{10}$ | 135·6 | 958 | Basalt, bk. | 6 | 23·6 | — | 23·6 | $\frac{1}{10}$ | 141·6 |
| 901 | Silicate, br. | 20 | 45·2 | | 45·2 | $\frac{1}{10}$ | 135·6 | 959 | Basalt, br. | 26—33 | 283·3 | | 283·4 | 2 | 141·7 |
| 902 | Silicate, gn. | 5—46 | 45·2 | | 45·2 | $\frac{1}{10}$ | 135·6 | 960 | Glass, bk. | 46—47 | 70·9 | | 70·9 | $\frac{1}{2}$ | 141·8 |
| 903 | Basalt, gn. | 16 | 22·6 | — | 22·7 | $\frac{1}{10}$ | 136·2 | 961 | Basalt, br. | 26—33 | 47·1 | | 47·3 | $\frac{1}{10}$ | 141·9 |
| 904 | Basalt, br. | 43 | 44·2 | 1·2 | 45·4 | $\frac{1}{10}$ | 136·2 | 962 | Basalt, br. | 20—33 | 141·5 | — | 142 | $\frac{1}{10}$ | 142· |
| 905 | Serpentine, &c. | 27 | 45·0 | | 45·4 | $\frac{1}{10}$ | 136·2 | 963 | Basalt, br. | 38—102 | 1420·4 | | 1420·4 | 10 | 142·0 |
| 906 | Syenite, bk., wt. | 33 | 45·6 | | 45·7 | $\frac{1}{10}$ | 137·1 | 964 | Basalt, bk. | 20—33 | 6640 | 460 | 7100 | 50 | 142 |
| 907 | Basalt, br. | 20—33 | 45·5 | | 45·7 | $\frac{1}{10}$ | 137·1 | 965 | Syenite, bk., wt. | 15—16 | 23·05 | — | 23·7 | $\frac{1}{10}$ | 142·2 |
| 908 | Limestone, wt. | 12 | 22·7 | — | 22·9 | $\frac{1}{10}$ | 137·4 | 966 | Syenite, bk., wt. | 20—24 | 23·7 | — | 23·7 | $\frac{1}{10}$ | 142·2 |
| | | | | | | | | 967 | Basalt, br. | 25—40 | 46·8 | | 47·4 | $\frac{1}{10}$ | 142·2 |
| | | | | | | | | 968 | Syenite, bk. | 40 | 141·7 | | 142·2 | 1 | 142·2 |
| | | | | | | | | 969 | Basalt, br. | 40 | 142·2 | | 142·2 | 1 | 142·2 |
| | | | | | | | | 970 | Limestone | 27 | 710·9 | | 711·0 | 5 | 142·2 |
| | | | | | | | | 971 | Basalt, br. | 20—27 | 1422·2 | | 1422·8 | 10 | 142·3 |
| | | | | | | | | 972 | Porphyry, gr. | 17—20 | 14·25 | — | 14·25 | $\frac{1}{10}$ | 142·5 |
| | | | | | | | | 973 | Alabaster | 38 | 46·5 | 1· | 47·5 | $\frac{1}{10}$ | 142·5 |
| | | | | | | | | 974 | Granite, pink | 19—20 | 2763·1 | 90 | 2850 | 20 | 142·5 |
| | | | | | | | | 975 | Hæmatite, bk. | 36—43 | 71·3 | | 71·3 | $\frac{1}{2}$ | 142·6 |
| | | | | | | | | 976 | Basalt, br. | high 33 | 1427·0 | | 1427·5 | 10 | 142·7 |
| | | | | | | | | 977 | Syenite, bk., wt. | 24—31 | 23·8 | — | 23·8 | $\frac{1}{10}$ | 142·8 |
| | | | | | | | | 978 | Alabaster | 25—26 | 71·2 | | 71·4 | $\frac{1}{10}$ | 142·8 |
| | | | | | | | | 979 | Diorite, gr. | 101 | 142·8 | | 142·8 | 1 | 142·8 |
| | | | | | | | | 980 | Syenite, gr. | 36—38 | 142·6 | | 142·8 | 1 | 142·8 |
| | | | | | | | | 981 | Porphyry, gr. | 33 | 1440 | ·3 | 143 | $\frac{1}{10}$ | 143· |
| | | | | | | | | 982 | Hæmatite, bk. | 1—15 | 71·5 | | 71·5 | $\frac{1}{2}$ | 143·0 |

| No. | Material. | Form. | Present. | Ch. | Ancient. | x | Unit. | No. | Material. | Form. | Present. | Ch. | Ancient. | x | Unit. |
|------|-------------------|---------|----------|------|----------|----------------|-------|------|-------------------|-------|----------|-----|----------|----------------|-------|
| 983 | Alabaster | 20—33 | 70·0 | — | 71·5 | $\frac{1}{2}$ | 143·0 | 1057 | Basalt, br. | 40 | 1466·2 | — | 1471· | 10 | 147·1 |
| 984 | Basalt, gn. | 33 | 23·85 | — | 23·85 | $\frac{1}{6}$ | 143·1 | 1058 | Gneiss, gr. | 33 | 147·3 | — | 147·4 | 1 | 147·4 |
| 985 | Sandstone | 40 | 1430·7 | — | 1430·7 | 10 | 143·1 | 1059 | Basalt, br. | 20—33 | 294·8 | — | 295·0 | 2 | 147·5 |
| 986 | Basalt, br. | 20—26 | 143·2 | — | 143·2 | 1 | 143·2 | 1060 | Basalt, bk. | 20—27 | 736·8 | — | 737·3 | 5 | 147·5 |
| 987 | Basalt, br. | 33 | 142·9 | — | 143·2 | 1 | 143·2 | 1061 | Syenite, bk. | 33—36 | 737·3 | — | 737·4 | 5 | 147·5 |
| 988 | Basalt, br. | 27—33 | 716·0 | — | 716·0 | 5 | 143·2 | 1062 | Syenite, gr. | 14 | 24·6 | — | 24·6 | $\frac{1}{6}$ | 147·6 |
| 989 | Basalt, bk. | 33—40 | 143·3 | — | 143·3 | 1 | 143·3 | 1063 | Syenite, bk., wt. | 14 | 24·1 | — | 24·6 | $\frac{1}{6}$ | 147·6 |
| 990 | Hæmatite | 38—44 | 143·3 | — | 143·3 | 1 | 143·3 | 1064 | Hæmatite | 52 | 147·6 | — | 147·6 | 1 | 147·6 |
| 991 | Hæmatite | 2—79 | 143·3 | — | 143·3 | 1 | 143·3 | 1065 | Basalt, br. | 33 | 295·2 | — | 295·2 | 2 | 147·6 |
| 992 | Syenite, gr. | 33 | 23·9 | — | 23·9 | $\frac{1}{6}$ | 143·4 | 1066 | Basalt, br. | 38—39 | 7379·0 | — | 7379·7 | 50 | 147·6 |
| 993 | Diorite | 26 | 23·6 | — | 23·9 | $\frac{1}{6}$ | 143·4 | 1067 | Syenite, bk. | 20—27 | 294·9 | — | 295·4 | 2 | 147·7 |
| 994 | Syenite, gr. | 46 | 23·8 | — | 23·9 | $\frac{1}{6}$ | 143·4 | 1068 | Sandstone | 32 | 73,830 | — | 73,830 | 500 | 147·7 |
| 995 | Basalt, bk. | 33 | 143·4 | — | 143·4 | 1 | 143·4 | 1069 | Syenite, bk. | 33 | 73,790 | — | 73,850 | 500 | 147·7 |
| 996 | Hæmatite | 2—41 | 143·6 | — | 143·6 | 1 | 143·6 | 1070 | Basalt, br. | 33—36 | 739·0 | — | 739·0 | 5 | 147·8 |
| 997 | Basalt, bk. | 33—36 | 287·7 | — | 287·7 | 2 | 143·8 | 1071 | Basalt, br. | 26—33 | 72·6 | — | 74·0 | 1 | 148·0 |
| 998 | Diorite, bk. | 32 | 24·0 | — | 24·0 | $\frac{1}{6}$ | 144· | 1072 | Gneiss, gr. | 40 | 67·3 | 7· | 74 | 1 | 148 |
| 999 | Basalt, br. | 19—27 | 47·2 | — | 48·0 | $\frac{1}{6}$ | 144·0 | 1073 | Hæmatite | 2—3 | 148·0 | — | 148·0 | 1 | 148·0 |
| 1000 | Basalt, br. | 32—33 | 48·0 | — | 48·0 | $\frac{1}{6}$ | 144·0 | 1074 | Basalt, br. | 33 | 146·2 | — | 148·0 | 1 | 148·0 |
| 1001 | Basalt, br. | 20—33 | 67·2 | 5 | 72· | $\frac{1}{3}$ | 144· | 1075 | Basalt, br. | 26—33 | 1402·2 | 80 | 1480 | 10 | 148·0 |
| 1002 | Limestone, wt. | high 33 | 669·6 | 50 | 720· | 5 | 144· | 1076 | Gneiss, gr. | 38—43 | 148·1 | — | 148·1 | 1 | 148·1 |
| 1003 | Basalt, br. | 26—33 | 1412·6 | — | 1440· | 10 | 144·0 | 1077 | Basalt, br. | 38—43 | 49·3 | — | 49·4 | $\frac{1}{3}$ | 148·2 |
| 1004 | Granite, red | 38—40 | 12,000· | 2400 | 14,400 | 100 | 144· | 1078 | Syenite, bk. | 17 | 49·4 | — | 49·4 | 2 | 148·2 |
| 1005 | Basalt | 33 | 12,710 | B | 14,400 | 100 | 144· | 1079 | Basalt, br. | 39—44 | 296·5 | — | 296·5 | 2 | 148·2 |
| 1006 | Basalt, bk. | 33 | 1441·6 | — | 1442·8 | 10 | 144·3 | 1080 | Basalt, br. | 33 | 726·4 | — | 741· | 5 | 148·2 |
| 1007 | Syenite, gr. | 37—39 | 14,430 | — | 14,430 | 100 | 144·3 | 1081 | Basalt, br. | 38 | 1482·8 | — | 1482·8 | 10 | 148·3 |
| 1008 | Syenite, gr. | 38—39 | 144·4 | — | 144·4 | 1 | 144·4 | 1082 | Basalt, gn. | 24—33 | 1485 | — | 1485 | $\frac{1}{10}$ | 148·5 |
| 1009 | Quartz, bk. | 17—24 | 14·45 | — | 14·45 | $\frac{1}{10}$ | 144·5 | 1083 | Gneiss, bk. | 38 | 2962·5 | — | 2970 | 20 | 148·5 |
| 1010 | Basalt, br. | 32 | 28·2 | — | 28·9 | $\frac{1}{6}$ | 144·5 | 1084 | Silicate, gr. | 21—44 | 24·7 | — | 24·8 | $\frac{1}{6}$ | 148·8 |
| 1011 | Basalt, br. | 33 | 722·7 | — | 722·8 | 50 | 144·5 | 1085 | Basalt, gr. | 33 | 24·6 | — | 24·8 | $\frac{1}{6}$ | 148·8 |
| 1012 | Diorite, bk. | 14 | 24·1 | — | 24·1 | $\frac{1}{6}$ | 144·6 | 1086 | Basalt, bk. | 19 | 24·8 | — | 24·8 | $\frac{1}{6}$ | 148·8 |
| 1013 | Basalt, br. | 27—33 | 48·1 | — | 48·2 | $\frac{1}{3}$ | 144·6 | 1087 | Diorite, bk. | 21—42 | 24·6 | — | 24·8 | $\frac{1}{6}$ | 148·8 |
| 1014 | Basalt, bk. | 20—33 | 48·2 | — | 48·2 | $\frac{1}{3}$ | 144·6 | 1088 | Diorite, bk. | 6—15 | 37·1 | — | 37·2 | $\frac{1}{4}$ | 148·8 |
| 1015 | Basalt, bk. | 33 | 48·2 | — | 48·2 | $\frac{1}{3}$ | 144·6 | 1089 | Syenite, bk., wt. | 33 | 49·6 | — | 49·6 | $\frac{1}{4}$ | 148·8 |
| 1016 | Hæmatite | 1 | 71·8 | — | 72·3 | $\frac{1}{3}$ | 144·6 | 1090 | Syenite, bk. | 101 | 74·3 | — | 74·4 | $\frac{1}{3}$ | 148·8 |
| 1017 | Basalt, br. | 19—40 | 14,350 | — | 14,460 | 100 | 144·6 | 1091 | Basalt, br. | 23—33 | 1487·6 | — | 1487·8 | 10 | 148·8 |
| 1018 | Basalt, bk. | 38—40 | 144·7 | — | 144·7 | 1 | 144·7 | 1092 | Basalt, br. | 27—33 | 14,800 | — | 14,880 | 100 | 148·8 |
| 1019 | Alabaster | 33—36 | 287·9 | — | 289·8 | 2 | 144·9 | 1093 | Syenite, gr. | 37—38 | 1486·9 | — | 1488·6 | 10 | 148·9 |
| 1020 | Syenite, gr. | 33 | 14·4 | — | 14·5 | $\frac{1}{10}$ | 145·0 | 1094 | Syenite, bk. | 15—17 | 14·3 | — | 14·9 | $\frac{1}{10}$ | 149· |
| 1021 | Basalt, br. | 33 | 145·0 | — | 145·0 | 1 | 145·0 | 1095 | Silicate, bk. | 12—14 | 74·5 | — | 74·5 | $\frac{1}{10}$ | 149·0 |
| 1022 | Limestone | 38—43 | 563·1 | 17 | 580 | 4 | 145· | 1096 | Basalt, br. | 38—39 | 72·5 | 2· | 74·5 | $\frac{1}{10}$ | 149·0 |
| 1023 | Basalt, br. | 36—38 | 145·1 | — | 145·1 | 1 | 145·1 | 1097 | Basalt, gr. | 15 | 146·8 | — | 149·0 | 1 | 149·0 |
| 1024 | Alabaster | 24 | 23·9 | — | 24·2 | $\frac{1}{6}$ | 145·2 | 1098 | Limestone | 38 | 290·1 | 8· | 298· | 2 | 149· |
| 1025 | Basalt, br. | 33 | 47·5 | — | 48·4 | $\frac{1}{6}$ | 145·2 | 1099 | Hæmatite | 16 | 24·85 | — | 24·85 | $\frac{1}{2}$ | 149·1 |
| 1026 | Basalt, br. | 38—40 | 290·3 | — | 290·4 | 2 | 145·2 | 1100 | Basalt, br. | 33 | 745·7 | — | 745·7 | 5 | 149·1 |
| 1027 | Syenite, gr., wt. | 26 | 145·3 | — | 145·3 | 1 | 145·3 | 1101 | Basalt, br. | 39—44 | 24·9 | — | 24·9 | $\frac{1}{10}$ | 149·4 |
| 1028 | Basalt, br. | 20—33 | 48·5 | — | 48·5 | $\frac{1}{3}$ | 145·5 | 1102 | Basalt, bk. | 33 | 74·7 | — | 74·7 | $\frac{1}{10}$ | 149·4 |
| 1029 | Gneiss, gr. | 5—43 | 48·5 | — | 48·5 | $\frac{1}{3}$ | 145·5 | 1103 | Basalt, br. | 27—40 | 299·0 | — | 299·0 | 2 | 149·5 |
| 1030 | Basalt, br. | 33 | 2904·1 | — | 2911· | 20 | 145·5 | 1104 | Alabaster | 43 | 747·5 | — | 747·5 | 5 | 149·5 |
| 1031 | Gneiss, bk. | 11—12 | 145·6 | — | 145·6 | 1 | 145·6 | 1105 | Basalt, br. | 33 | 2991·6 | — | 2994·5 | 20 | 149·7 |
| 1032 | Basalt, br. | 33 | 291·2 | — | 291·2 | 2 | 145·6 | 1106 | Syenite, gr. | 33—36 | 149·8 | — | 149·8 | 1 | 149·8 |
| 1033 | Sandstone | 40 | 7250 | — | 7280 | 50 | 145·6 | 1107 | Basalt, br. | 33 | 299·8 | — | 299·8 | 2 | 149·9 |
| 1034 | Basalt, br. | 27—40 | 728·6 | — | 728·8 | 5 | 145·7 | 1108 | Basalt, br. | 26 | 150· | — | 150· | $\frac{1}{10}$ | 150· |
| 1035 | Basalt, br. | 26—33 | 24·3 | — | 24·3 | $\frac{1}{6}$ | 145·8 | 1109 | Basalt, br. | 33 | 750· | — | 750· | $\frac{1}{10}$ | 150·0 |
| 1036 | Gneiss, gr. | 26—33 | 24·0 | — | 24·3 | $\frac{1}{6}$ | 145·8 | 1110 | Syenite, bk. | 38—43 | 72·9 | 2 | 75· | $\frac{1}{2}$ | 150 |
| 1037 | Diorite, bk. | 26—33 | 47·9 | — | 48·6 | $\frac{1}{3}$ | 145·8 | 1111 | Limestone | 33—36 | 593·3 | B | 750 | 5 | 150 |
| 1038 | Syenite, bk. | 26—33 | 72·6 | — | 72·9 | $\frac{1}{3}$ | 145·8 | 1112 | Syenite, gr. | 32 | 1125 | B | 1500 | 10 | 150 |
| 1039 | Basalt, bk. | 26—33 | 145·8 | — | 145·8 | 1 | 145·8 | 1113 | Basalt, gr. | 26—28 | 751·5 | — | 751·5 | 5 | 150·3 |
| 1040 | Basalt, br. | 40 | 7242 | — | 7300 | 50 | 146·0 | 1114 | Alabaster | 26—33 | 750· | — | 75·2 | $\frac{1}{10}$ | 150·4 |
| 1041 | Basalt, br. | 20—33 | 1455·1 | — | 1461· | 10 | 146·1 | 1115 | Alabaster | 26—33 | 750· | — | 75·2 | $\frac{1}{10}$ | 150·4 |
| 1042 | Basalt, bk. | 26—33 | 73·1 | — | 73·1 | $\frac{1}{3}$ | 146·2 | 1116 | Basalt, br. | 26—33 | 49·5 | — | 50·2 | $\frac{1}{3}$ | 150·6 |
| 1043 | Basalt, br. | 19—20 | 145·7 | — | 146·2 | 1 | 146·2 | 1117 | Syenite, bk. | 38 | 150·3 | — | 150·6 | 1 | 150·6 |
| 1044 | Basalt | 20—40 | 731·3 | — | 731·3 | 5 | 146·3 | 1118 | Syenite, bk. | 12—20 | 50·2 | — | 50·3 | $\frac{1}{10}$ | 150·9 |
| 1045 | Basalt, bk. | 33 | 146·6 | — | 146·6 | 1 | 146·6 | 1119 | Basalt, br. | 26—33 | 3003·5 | — | 3020 | 20 | 151·0 |
| 1046 | Basalt, bk. | 33 | 293·3 | — | 293·3 | 2 | 146·6 | 1120 | Quartz, wt. | 14 | 25·2 | — | 25·2 | $\frac{1}{6}$ | 151·2 |
| 1047 | Basalt, br. | 33 | 293·7 | — | 293·8 | 2 | 146·9 | 1121 | Basalt, bk. | 33 | 25·2 | — | 25·2 | $\frac{1}{6}$ | 151·2 |
| 1048 | Basalt, br. | 27 | 733·9 | — | 734·4 | 5 | 146·9 | 1122 | Serpentine, bk. | 21 | 151·2 | — | 151·4 | 1 | 151·4 |
| 1049 | Hæmatite | 1—47 | 24·5 | — | 24·5 | $\frac{1}{6}$ | 147·0 | 1123 | Diorite, bk. | 2—38 | 25·25 | — | 25·25 | $\frac{1}{10}$ | 151·5 |
| 1050 | Silicate, bk. | 52 | 31·9 | B | 49 | $\frac{1}{3}$ | 147· | 1124 | Limestone, gr. | 10—42 | 23·2 | B | 25·3 | $\frac{1}{10}$ | 151·8 |
| 1051 | Basalt, br. | 33 | 71·8 | 1·7 | 73·5 | $\frac{1}{3}$ | 147· | 1125 | Basalt, br. | 20—26 | 50·6 | — | 50·6 | $\frac{1}{10}$ | 151·8 |
| 1052 | Basalt, br. | 26—33 | 73·5 | — | 73·5 | $\frac{1}{3}$ | 147·0 | 1126 | Sandstone | 31—36 | 7596 | — | 7596 | 50 | 151·9 |
| 1053 | Syenite, gr. | 33 | 127·0 | 20 | 147· | 1 | 147· | 1127 | Basalt, br. | 33 | 760 | — | 760 | $\frac{1}{2}$ | 152·0 |
| 1054 | Basalt, br. | 33 | 139·1 | 8 | 147· | 1 | 147· | 1128 | Alabaster | 26 | 50·7 | — | 50·7 | $\frac{1}{2}$ | 152·1 |
| 1055 | Basalt, br. | 20—33 | 277·5 | 17· | 294 | 2 | 147· | 1129 | Basalt, gr. | 60—83 | 1527·0 | — | 1527·0 | 10 | 152·7 |
| 1056 | Basalt, bk. | 39—44 | 731·5 | — | 735· | 5 | 147·0 | 1130 | Basalt, br. | 33—40 | 3049·7 | — | 3055· | 20 | 152·7 |

| No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. |
|------|---------------|-------|----------|-----|----------|---------------|-------|
| 1131 | Hæmatite | 3—16 | 51·0 | | 51·0 | $\frac{1}{3}$ | 153·0 |
| 1132 | Silicate, bk. | 14—17 | 25·55 | — | 25·55 | $\frac{1}{3}$ | 153·3 |
| 1133 | Basalt, gn. | 33 | 51·1 | | 51·1 | $\frac{1}{3}$ | 153·3 |
| 1134 | Basalt, gr. | 26—33 | 307·3 | | 307·3 | $\frac{1}{3}$ | 153·6 |
| 1135 | Basalt, bk. | 38—40 | 76·9 | — | 77·2 | $\frac{1}{3}$ | 154·4 |
| 1136 | Diorite, bk. | 32—39 | 25·7 | — | 25·7 | $\frac{1}{3}$ | 154·2 |
| 1137 | Hæmatite, bk. | 5 | 51·4 | | 51·4 | $\frac{1}{3}$ | 154·2 |
| 1138 | Basalt, br. | 33 | 77·2 | | 77·2 | $\frac{1}{3}$ | 154·4 |
| 1139 | Basalt, br. | 33 | 77·2 | | 77·3 | $\frac{1}{3}$ | 154·6 |
| 1140 | Basalt, br. | 33 | 1825 | B | 3100 | $\frac{1}{3}$ | 155·7 |
| 1141 | Gneiss, bk. | 21—41 | 51·9 | | 51·9 | $\frac{1}{3}$ | 155·7 |
| 1142 | Basalt, bk. | 55 | 1557·1 | | 1557·1 | $\frac{1}{3}$ | 155·7 |
| 1143 | Syenite, bk. | 4—19 | 52·0 | | 52·0 | $\frac{1}{3}$ | 156·0 |
| 1144 | Flint, br. | 38—43 | 52·0 | | 52·0 | $\frac{1}{3}$ | 156·0 |
| 1145 | Basalt, br. | 38—39 | 312·5 | | 312·5 | $\frac{1}{3}$ | 156·2 |
| 1146 | Basalt, br. | 26 | 52·1 | | 52·1 | $\frac{1}{3}$ | 156·3 |

| ATTIC DRACHMA STANDARD (43). | | | | | | | |
|------------------------------|----------------------|--------|----------|-----|----------|---------------|-------|
| No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. |
| 1202 | Quartz, wt. | 26—27 | 131·0 | | 131·0 | 2 | 65·5 |
| 1203 | Basalt, br. | 33? | 6051 | 500 | 6550 | 100 | 65·5 |
| 1204 | Limestone, pink | 15—16 | 21·85 | — | 21·85 | $\frac{1}{3}$ | 65·6 |
| 1205 | Basalt, bk. | 17—20 | 10·95 | — | 10·95 | $\frac{1}{3}$ | 65·7 |
| 1206 | Limestone | 15—16 | 65·7 | | 65·7 | 1 | 65·7 |
| 1207 | Alabaster | 81 | 11·0 | — | 11·0 | $\frac{1}{3}$ | 66· |
| 1208 | Alabaster | 21—33 | 21·8 | — | 22·0 | $\frac{1}{3}$ | 66·0 |
| 1209 | Syenite, bk. | 5—59 | 22·0 | — | 22·0 | $\frac{1}{3}$ | 66·0 |
| 1210 | Basalt, bk. | 12—83 | 131·3 | | 132·0 | 2 | 66·0 |
| 1211 | Basalt, br. | 26 | 2587·0 | | 2640 | 40 | 66·0 |
| 1212 | Basalt, bk. | 37—38 | 66·1 | | 66·2 | 1 | 66·2 |
| 1213 | Basalt, br. | 40 | 264·6 | | 264·8 | 4 | 66·2 |
| 1214 | Alabaster | 29—43 | 1291·9 | 33 | 1325 | 20 | 66·2 |
| 1215 | Basalt, bk. | 36—38 | 266·2 | | 266·2 | 4 | 66·5 |
| 1216 | Basalt, br. | 20 | 22·1 | — | 22·2 | $\frac{1}{3}$ | 66·6 |
| 1217 | Basalt, bk. | 39—45 | 66·6 | | 66·6 | 1 | 66·6 |
| 1218 | Basalt, bk. | 20—26 | 133·2 | | 133·2 | 2 | 66·6 |
| 1219 | Alabaster | 33 | 65·3 | 4 | 66·7 | 1 | 66·7 |
| 1220 | Hornblende | 59 | 33·4 | — | 33·4 | $\frac{1}{3}$ | 66·8 |
| 1221 | Basalt, br. | 21 | 262·5 | | 268 | 4 | 67·0 |
| 1222 | Syenite, gr. | 109 | 667·8 | | 670 | 10 | 67·0 |
| 1223 | Syenite, gr. | 38—40 | 67·0 | | 67·1 | 1 | 67·1 |
| 1224 | Basalt, br. | 32—33 | 268·4 | | 268·4 | 4 | 67·1 |
| 1225 | Limestone, gr., wt. | 20—33 | 22·4 | — | 22·4 | $\frac{1}{3}$ | 67·2 |
| 1226 | Basalt, bk. | 20—33 | 134·6 | | 134·6 | 2 | 67·3 |
| 1227 | Syenite, gr. | 14—19 | 131·5 | | 131·8 | 2 | 67·4 |
| 1228 | Syenite, bk. | 19—35 | 247·8 | 20 | 270 | 4 | 67·5 |
| 1229 | Basalt, br. | 33 | 242·9 | 30 | 270 | 4 | 67·5 |
| 1230 | Limestone | 19 | 242·5 | 30 | 270 | 4 | 67·5 |
| 1231 | Limestone | 19—21 | 669·5 | | 676 | 10 | 67·6 |
| 1232 | Basalt, bk. | 10—38 | 1349·9 | | 1352 | 20 | 67·6 |
| 1233 | Serpentine, gr., wt. | 26 | 135·4 | | 135·5 | 2 | 67·7 |
| 1234 | Hæmatite | 41—45 | 16·95 | — | 16·95 | $\frac{1}{3}$ | 67·8 |
| 1235 | Syenite, bk. | 110 | 673·0 | | 679· | 10 | 67·9 |
| 1236 | Alabaster | 26—33 | 655·9 | 25 | 680· | 10 | 68·0 |
| 1237 | Alabaster | 10—35 | 681·1 | | 682· | 10 | 68·2 |
| 1238 | Alabaster | 33 | 269·8 | | 275· | 4 | 68·2 |
| 1239 | Alabaster | 33 | 135·7 | | 136·6 | 2 | 68·3 |
| 1240 | Basalt, br. | 33 | 132·7 | 4 | 137 | 2 | 68·5 |
| 1241 | Basalt, br. | 19—49 | 2743 | | 2744 | 20 | 68·6 |
| 1242 | Sandstone | 26—32 | 677·8 | | 6860 | 100 | 68·6 |
| 1243 | Hæmatite, br. | 2—41 | 68·3 | | 68·7 | 1 | 68·7 |
| 1244 | Basalt, br. | 77—110 | 275·8 | | 275·8 | 4 | 68·9 |

| PHENICIAN SHEKEL STANDARD (22). | | | | | | | |
|---------------------------------|--------------------|---------|----------|-----|----------|----------------|-------|
| No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. |
| 1245 | Hæmatite | 44 | 26·25 | — | 26·25 | $\frac{1}{8}$ | 210·0 |
| 1246 | Sandstone | 18—27 | 126·120 | | 126·120 | (600) | 210·2 |
| 1247 | Syenite, gr. | 23—33 | 26·15 | — | 26·3 | $\frac{1}{8}$ | 210·4 |
| 1248 | Syenite, bk. | 33 | 26·4 | — | 26·4 | $\frac{1}{8}$ | 211·2 |
| 1249 | Limestone | 9 | 834·0 | | 849· | 4 | 212· |
| 1250 | Felspar, red | 7—18 | 26·75 | — | 26·75 | $\frac{1}{2}$ | 214· |
| 1251 | Syenite, gr. | 38—39 | 963·4 | 110 | 1070 | $\frac{1}{2}$ | 214· |
| 1252 | Basalt, br. | 33 | 8606 | | 8606 | 40 | 215·1 |
| 1253 | Quartz, clear | 24 | 26·9 | — | 26·9 | $\frac{1}{8}$ | 215·2 |
| 1254 | Syenite, bk. | 19—33 | 4364·3 | | 4364·5 | 20 | 218·2 |
| 1255 | Silicate, bl., wt. | 28—30 | 9·0 | — | 9·1 | $\frac{1}{24}$ | 218·4 |
| 1256 | Basalt, gn. | 5—44 | 27·5 | — | 27·5 | $\frac{1}{3}$ | 220· |
| 1257 | Alabaster | 33 | 207·0 | 13 | 220 | 1 | 220· |
| 1258 | Limestone | 111 | 829·2 | B | 1100 | 5 | 220· |
| 1259 | Basalt, bk. | high 23 | 1974·7 | 230 | 2200·? | 10 | 220· |
| 1260 | Basalt, br. | 20—23 | 220·4 | | 223· | 1 | 223· |
| 1261 | Basalt, br. | 18 | 9010 | | 9040 | 40 | 226· |
| 1262 | Sandstone | 18—19 | 907·4 | | 907·4 | 4 | 226·8 |
| 1263 | Basalt, gn. | 16 | 9·45 | — | 9·5 | $\frac{1}{24}$ | 228· |
| 1264 | Basalt, gn. | 20—23 | 9·7 | — | 9·7 | $\frac{1}{24}$ | 232·8 |
| 1265 | Basalt, gn. | 37—40 | 9·75 | — | 9·75 | $\frac{1}{24}$ | 234· |
| 1266 | Limestone, bk. | 24—33 | 9·95 | — | 9·95 | $\frac{1}{24}$ | 239· |

ASSYRIAN SHEKEL STANDARD (55).

| | | | | | | | |
|------|--------------------|---------|--------|------|--------|----------------|-------|
| 1147 | Basalt, bk. | 15—16 | 19·45 | — | 19·7 | $\frac{1}{6}$ | 118· |
| 1148 | Limestone, gr. | 5—17 | 59·3 | | 59·3 | $\frac{1}{6}$ | 118·6 |
| 1149 | Limestone, bk. | 16 | 11·3 | — | 11·9 | $\frac{1}{10}$ | 119 |
| 1150 | Basalt, br. | 23—26 | 59·5 | | 59·8 | $\frac{1}{10}$ | 119·6 |
| 1151 | Syenite, bk., wt. | 115 | 19·95 | — | 20·0 | $\frac{1}{10}$ | 120· |
| 1152 | Beryl | 108 | 20·1 | — | 20·1 | $\frac{1}{10}$ | 120·6 |
| 1153 | Limestone | 9—11 | 1115·0 | 100 | 1210 | 10 | 121 |
| 1154 | Basalt, bk. | 15 | 18·85 | 1·5 | 20·3 | $\frac{1}{10}$ | 121·8 |
| 1155 | Mica slate | 64 | 20·3 | — | 20·3 | $\frac{1}{10}$ | 121·8 |
| 1156 | Sandstone | 20—33 | 43,950 | | 43,950 | 360 | 122·1 |
| 1157 | Marble, wt., gr. | 33 | 122·2 | | 123·0 | 1 | 123·0 |
| 1158 | Granite, pink | 33 | 44,420 | | 44,700 | 360 | 124· |
| 1159 | Sandstone | 20—31 | 43,480 | 1000 | 44,500 | 360 | 124 |
| 1160 | Silicate, bk. | 32 | 8·0 | B | 12·5 | $\frac{1}{10}$ | 125 |
| 1161 | Limestone, gr. | 26—33 | 41·6 | | 41·7 | $\frac{1}{3}$ | 125·1 |
| 1162 | Stenite, bk. | 4—32 | 12·55 | — | 12·55 | $\frac{1}{10}$ | 125·5 |
| 1163 | Chlorite | 20—22 | 8·3 | — | 8·4 | $\frac{1}{15}$ | 126· |
| 1164 | Basalt, br. | 36—38 | 121·5 | 4·5 | 126· | 1 | 126· |
| 1165 | Alabaster | 26 | 118·1 | 8· | 126· | 1 | 126· |
| 1166 | Limestone | 11 | 2462·8 | 60 | 2520 | 20 | 126· |
| 1167 | Limestone | 32—40 | 62·9 | | 63·2 | $\frac{1}{2}$ | 126·4 |
| 1168 | Diorite, bk. | 16—21 | 12·65 | — | 12·65 | $\frac{1}{10}$ | 126·5 |
| 1169 | Basalt, br. | 38—39 | 759·1 | | 759·2 | 6 | 126·5 |
| 1170 | Limestone, wt. | 19—21 | 15,200 | | 15,200 | 120 | 126·7 |
| 1171 | Syenite, gr. | 37—39 | 3807·3 | | 3807·3 | 30 | 126·9 |
| 1172 | Silicate, bk., wt. | 59 | 12·7 | — | 12·7 | $\frac{1}{10}$ | 127 |
| 1173 | Hæmatite | 33 | 10·6 | — | 10·6 | $\frac{1}{10}$ | 127·2 |
| 1174 | Basalt, gn. | 33 | 12·75 | — | 12·75 | $\frac{1}{10}$ | 127·5 |
| 1175 | Syenite, bk., wt. | 22—24 | 12·75 | — | 12·75 | $\frac{1}{10}$ | 127·5 |
| 1176 | Basalt, br. | 33 | 7641 | | 7649 | 60 | 127·5 |
| 1177 | Basalt, br. | 18—40 | 1276·4 | | 1276·4 | 10 | 127·6 |
| 1178 | Hornstone, gn. | 16—17 | 10·65 | — | 10·65 | $\frac{1}{24}$ | 127·8 |
| 1179 | Basalt, br. | 37—38 | 3068 | | 3068 | 24 | 127·8 |
| 1180 | Basalt, bk. | 32—33 | 34,480 | B | 46,000 | 360 | 128 |
| 1181 | Alabaster | 23—33 | 42·8 | | 42·8 | $\frac{1}{20}$ | 128·4 |
| 1182 | Alabaster | 18—19 | 2491·7 | 80 | 2570 | 20 | 128·5 |
| 1183 | Alabaster | 43 | 635·8 | | 643 | 5 | 128·6 |
| 1184 | Silicate, bk., wt. | 11—81 | 42·9 | | 42·9 | $\frac{1}{10}$ | 128·7 |
| 1185 | Basalt, br. | 20—33 | 1274·5 | | 1287· | 10 | 128·7 |
| 1186 | Diorite? | 22—35 | 12·8 | — | 12·9 | $\frac{1}{10}$ | 129 |
| 1187 | Basalt, br. | 4—35 | 763·3 | | 774 | 6 | 129·0 |
| 1188 | Granite, pink | 43 | 1247·1 | 40 | 1290 | 10 | 129·0 |
| 1189 | Limestone | 111 | 2585·8 | | 2586·5 | 20 | 129·3 |
| 1190 | Basalt, gn. | 5—16 | 42·85 | | 43·2 | $\frac{1}{3}$ | 129·6 |
| 1191 | Basalt, gn. | 12—38 | 42·75 | | 43·2 | $\frac{1}{3}$ | 129·6 |
| 1192 | Limestone | high 33 | 1261 | B | 1560 | 12 | 130 |
| 1193 | Granite, gr. | 33 | 21,320 | B | 26,000 | 200 | 130 |
| 1194 | Granite, gr. | 33—40 | 33,070 | B | 39,000 | 300 | 130 |
| 1195 | Slate? gn. | 16 | 43·6 | | 43·6 | $\frac{1}{3}$ | 130·8 |
| 1196 | Syenite, bk. | 33—36 | 15,720 | | 15,720 | 120 | 131·0 |
| 1197 | Basalt, gn. | 23 | 13·15 | — | 13·15 | $\frac{1}{10}$ | 131·5 |
| 1198 | Basalt, gr. | 83—84 | 43·8 | | 43·8 | $\frac{1}{3}$ | 131·8 |
| 1199 | Limestone, br. | 20 | 44·1 | | 44·1 | $\frac{1}{3}$ | 132·3 |
| 1200 | Basalt, br. | 44 | 44·2 | | 44·2 | $\frac{1}{3}$ | 132·3 |
| 1201 | Basalt, bk. | 36—40 | 2586 | B | 4000 | 30 | 133·6 |

EGINETAN DRACHMA STANDARD (10).

| No. | Material. | Form. | Present. | Ch. | Ancient. | × | Unit. |
|------|-------------------|-------|----------|-----|----------|---------------|-------|
| 1267 | Alabaster | 16—23 | 89·8 | — | 90·0 | 1 | 90·0 |
| 1268 | Hæmatite | 57 | 15·65 | — | 15·65 | $\frac{1}{6}$ | 93·9 |
| 1269 | Basalt, br. | 33 | 15·8 | — | 15·8 | $\frac{1}{6}$ | 94·8 |
| 1270 | Serpentine | 16 | 15·75 | — | 15·8 | $\frac{1}{6}$ | 94·8 |
| 1271 | Syenite, bk., wt. | 14—22 | 15·85 | — | 15·9 | $\frac{1}{6}$ | 95·4 |
| 1272 | Basalt, gn. | 33 | 15·85 | — | 15·9 | $\frac{1}{6}$ | 95·4 |
| 1273 | Basalt, br. | 38—40 | 381·5 | — | 381·5 | 4 | 95·4 |
| 1274 | Basalt, bk. | 37—39 | 15·95 | — | 15·95 | $\frac{1}{6}$ | 95·7 |
| 1275 | Basalt, br. | 20—26 | 2364·7 | — | 2400 | 25 | 96·0 |
| 1276 | Limestone | 122 | 949·3 | 40 | 990 | 10 | 99·0 |

PERSIAN SIGLOS STANDARD (2).

| | | | | | | | |
|------|--------------|-------|--------|----|--------|----|-------|
| 1277 | Basalt, gr. | 2 | 5145·7 | — | 5145·7 | 60 | 85·76 |
| 1278 | Syenite, gr. | 20—33 | 164·2 | 10 | 174· | 2 | 87· |

EIGHTY GRAIN STANDARD (14).

| | | | | | | | |
|--------|--------------|---------|--------|---|--------|-----|------|
| [1142] | Basalt, bk. | 55 | 1557·1 | — | 1557·1 | 20 | 77·9 |
| 1279 | Basalt, br. | 33 | 156·0 | — | 156·0 | 2 | 78·0 |
| [1145] | Basalt, br. | 38—39 | 312·5 | — | 312·5 | 4 | 78·1 |
| 1280 | Basalt, br. | 20—33 | 315·1 | — | 315·1 | 4 | 78·8 |
| 1281 | Basalt, br. | 33 | 78·7 | — | 79·4 | 1 | 79·4 |
| 1282 | Basalt, br. | 26—31 | 7920 | — | 7960 | 100 | 79·6 |
| 1283 | Basalt, br. | high 33 | 804·1 | — | 804·1 | 10 | 80·4 |
| 1284 | Basalt, br. | 20—23 | 6123 | B | 6450 | 80 | 80·6 |
| 1285 | Basalt, br. | 26—38 | 3240 | — | 3240 | 40 | 81·0 |
| 1286 | Basalt, br. | 33 | 8112 | — | 8116 | 100 | 81·2 |
| 1287 | Syenite, bk. | 36—40 | 811·6 | — | 811·8 | 10 | 81·2 |
| 1288 | Gneiss, bk. | 2—8 | 3251·8 | — | 3264 | 40 | 81·6 |
| 1289 | Limestone | 9—10 | 808·7 | — | 818 | 10 | 81·8 |
| 1290 | Limestone | 18—38 | 3281·8 | — | 3286 | 40 | 82·1 |
| 1291 | Basalt, br. | 33 | 328·3 | — | 328·3 | 4 | 82·1 |
| 1292 | Basalt, br. | 39—44 | 830·1 | — | 830·5 | 10 | 83·0 |

83.—NOTES ON THE WEIGHTS.

533. This has three small holes drilled in one side, and one in another side, apparently for plugging it; and the allowance of loss is by reckoning these holes to have been nearly filled with lead.

564. This seems least likely to be a kat weight from its appearance, yet it agrees to no other standard. The letters NAY retrograde on the top evidently refer to Naukratis.

602. This is drilled with one hole, like those above.

729. Very roughly cut in soft limestone.

762. The base of this is merely rough fractured.

767. An onyx-like limestone, with a white layer between two black ones.

782. This has had an iron handle, fixed in with lead, on the top of it; the tangs of the handle remain in.

793, 813, 814, 815. All these are marked with a cross on the top, lightly marked by a chisel cut; as the fractions of the shekel vary, and as also three others with crosses were attributed to the Phœnician shekel last year (Nos. 360, 383, 403), it seems that this mark denotes this standard; seven examples on one standard, and none on weights of any other standard, is a strong case.

883. May be a plummet; there is a patch of rust as from a piece of iron wire upon it (see figure).

885. Found in Ptolemaic workshop in temenos.

889. Found in a large hosh at extreme S. of plain.

892. Found with 885.

895. From Gemaiyemi.

Those found together at Defenneh are stated in discussion of variations.

896, 899, 903, 908. These might well be Attic di oboli, but for two considerations; first, the proportion of $\frac{1}{3}$ rds and $\frac{1}{4}$ ths of the kat is generally about equal throughout, and as the $\frac{1}{3}$ rds cannot be tetroboli (at least in such numbers) and must be attributed to the kat, so the $\frac{1}{4}$ ths are required here to maintain the usual proportion; and, second, on turning to the Attic list it will be seen that dioboli are not common, and are very scarce in the higher range. The materials bear out this arrangement.

1142, 1145 may be doubtful, and might the rather rank as low examples of the 80-grain unit, as they are entered in the diagram, and bracketed in the list of 80-grain units; the presence of many $\frac{1}{3}$ rds of the kat is, however, somewhat in favour of the kat.

1147. It is impossible, perhaps, to disentangle the small fractions of the low Assyrian and high Phœnician units, but there is a well-marked gap between the larger and certain examples; the highest Phœnician being 226·8, and the lowest Assyrian $\frac{1}{2}$ of 237·2.

1195—1201. All these safely belong to the Assyrian unit, by their multiples, though they trench on the lowest range of the Attic.

1202. This may be attributed to the Attic, as there is no good Assyrian example anywhere higher than this; and the Attic begin lower than this at Naukratis. 1203 also is clearly Attic by the multiple.

1244. This is probably Attic by the ovoid form. The exact division between high Attic and low Egyptian is hard to fix, but considering forms and materials the separation seems to be as here given.

84. We will now turn to the plates of curves in which the whole results of these tables can be grasped by the eye. On pl. xlviii. we have a diagram exactly like that published last year, only the curves there published are here in dotted lines, and the total curves representing all the weights of Naukratis in both years are in full lines. First we must notice the remarkable way in which almost every sweep and bend in the curves of 1885 finds a repetition on an enlarged scale in the total curves. If all these small details of a curve (such as, for instance, the Egyptian curve) were but mere accidents of distribution—as indeed any one without a familiarity with curves and their teachings might well suppose them to be—it would be wholly unlikely that a fresh series collected another year should offer just the same

peculiarities. A larger and more extended collection might just as likely have blotted out all these rises and falls in a dead level, or even reversed them, if they were but accidents of a chance distribution or selection; but when we see every one of these details still prominent, and even reinforced into more striking proportions, no one can doubt but that there is a distinct meaning in almost every turn and twist of the curves. In fact they represent a whole history of changes which have gone before, and to unravel which needs similar information of other ages. Looking at them in detail, we see that the 80-grain curve has lost the slight dip it had in 1885, and is carried rather lower. The Persian curve is precisely enlarged, though still very small. The Æginetan retains even more markedly the sudden division into two varieties, which we might distinguish perhaps as the monetary and the commercial. Some examples included in it last year should, I now think, be otherwise attributed; Nos. 415 and 416 to the Persian, and Nos. 419, 420, 427, 429, 431, 434, and 436 to the $\frac{1}{3}$ rd and $\frac{1}{4}$ th kat, since more of these are now undoubtedly found. These changes I have made in the curves. The Phœnician curve follows much the same irregular course, and the rises at 223 and 231 grains are well reinforced. The Assyrian, though rather irregular in the changes of the sparse beginning of it, shows the same characteristics generally strengthened and brought out. The Attic is a fine case of every feature being well reinforced. Lastly, the Egyptian is also bettered in a remarkable way; the slight pause in the dotted curve at 140 is deepened into a distinct separation in the general curve, the rises and falls of the curve beyond are heightened and deepened, and the hump in the old curve at 150 is developed into a distinct and second rise in the total curve.

85. The meaning of all these fluctuations

in the commonness of different value of the standard is that several archetypal standards existed; and these by more care being exercised in later times became fixed, and were transmitted in different proportions. Thus in the Attic group there were standards of 65·2, 66·3, 67·3, and 68·4 grains; and these were transmitted and all used contemporaneously in the same place. The lowest, 65·2, is the standard of the earliest coinage; later the coinage went over to the standard of 66·3, passing from a rather low 66·0 to a higher 66·6, but still distinctly belonging to this group, and not to that of 67·3 or 68·4, which seem to have been entirely commercial varieties.

86. Having then, by the close similarity of the results of the two different collections of weights from one place, proved the substantial reality of their fluctuations of standards, we now turn to the Defenneh results to see how far such fluctuations extend. Are they the results of local accidents of mixture, or are they general characteristics? On pl. xlix. will be seen the Defenneh results shown in full line, and the Naukratite results in dotted line, which are reduced to half the height in the Assyrian, three-fourths in the Attic, and to one-third the height in the Egyptian standard, in order to bring them within the sheet and avoid confusion; this merely affects the height, without in the least altering the form or range of the curves. The results are most instructive. The ranges of the curves are almost unaltered, though in some cases (i.e. Æginetan and Phœnician) certain groups are missing. The 80-grain has a main development high up at 81 grains. The fluctuations of the Phœnician are seen to be purely local. The Assyrian, though irregular in the scanty beginning of it, swells up at just the same point, 126 grains; and has a corresponding fall between this and the larger group at 129 grains, which

may be called the monetary standard, the Darics all belonging to this group. The Attic entirely omits the earliest monetary variety of 65.2, and begins with the group of 66.3; but this and the next group of 67.3 are well defined; the last group extends higher at Defenneh, and this may be accounted for by the great use made here of $\frac{1}{3}$ rd and $\frac{1}{4}$ ths of the kat, which would incline the Greeks to stretch the Attic drachma to meet it by the oboli. In fact it is very possible that the low group of $\frac{1}{3}$ rd and $\frac{1}{4}$ th kats may have been intended as amphibious weights, serving for these fractions of the kat or for tetroboli and dioboli of the Attic system. In the Egyptian kat curves, which are the most perfect owing to the large number of examples, we have the most complete accordance. Not a wave of the Naukratis curve is lost in the Defenneh curve; two cases at 143 and 150 are smudged and reduced to mere humps, but still the same cause is plainly at work which produced the stable types of the Naukratis curves, which appeared in 1885, and in both years together.

87. Seeing then that the archetype varieties of Naukratis in the sixth century B.C. and onward are identical with the archetypes of Defenneh, on the opposite side of the Delta but at the same time, there comes the still broader question, are these archetypes common to the whole of Egyptian weights? Unfortunately existing collections are but scanty in comparison with the large numbers we have been dealing with; and we are in almost entire ignorance of the site or age of a single example. Still, taking the whole of existing collections (including all published and half as much again of unpublished examples) without proper corrections for loss or changes, we have the curve shown in dotted line in the top diagram of pl. 1. Here we see the Naukratis curve of the kat, the Defenneh curve, and the curve of all previous collections, given on the same scale.

Here, after a little confusion of scanty examples, there is, out of half-a-dozen waves and intermediate dips from 138 to 152 grains range, but one turn not fully shown in the general collection as in the Naukratite. The dip at 139 grains is filled up, but only two examples surplus here suffices to extinguish it. The correspondence is most remarkable; and the comparison of these three curves of the same nature, but from different sources, establishes more firmly than any reasoning could the decisive importance of even small turns in such curves of distribution, whenever the number of examples suffices to avoid casual errors. The numbers are never large in the general collections curve, never over 8, and usually but 3 or 4 in each grain space; and yet a change of omitting or including a couple more weights at almost any point would impair the resemblance between it and the Naukratite curve. As many of these weights come from Thebes and Upper Egypt, we are clear of the suspicion that they were all derived from Naukratis to begin with, though that is probably the case with some of them.

88. We are then face to face with the conclusion that for the later periods of Egyptian history there were different families of kat weights, perpetuated and transmitted without their archetypes ever being quite masked in the process, and that these families were generally diffused in somewhat similar proportions throughout the country. There is a close literary parallel to this in the history of manuscripts; they can be traced into families of readings, any given MS. can be assigned to its general group, and yet often cases occur which are intermediate, just like those weights in the dips between the groups. These families of MSS. have come down from certain archetypes: such as, in the case of the New Testament, the Byzantine, the Alexandrine, and the Western families; and the versions, Italic, Syriac, Coptic,

Vulgate, Gothic, Ethiopic, Armenian, &c., each leading off with their family of readings. In the case of manuscripts the varieties are far more perplexing, but there is also far more to work on; they vary, in short, in n dimensions, while weights vary but in one dimension. Still the parallel historically is very close; and we can realize from it that what now needs to be done for each standard of weight, Egyptian, Assyrian, Attic, &c., is to determine what the pure archetype of each variety was as closely as we can (like the pure text of a version), then to settle when that archetype arose (the date of a version), and what its subsequent history and dispersion has been (like the history of a version): in this way an approach to scientific metrology may be made. At present the study of weights is much where the study of MSS. was some centuries ago.

89. Having now seen the permanent and important character of curves of distribution, we will turn to see what can be further learned from them. There are two theories of the derivation of the Phœnician standard, one through an uncertain relation between electrum, gold, and silver, deriving it from the Æginetan, as proposed by Brandis; unfortunately the uncertainty of the value of electrum, and indeed its variable composition, prevent this being accurately tested. But the other theory, that of Mr. Head, deriving the Phœnician drachm of silver from being of an equal value to the $\frac{1}{60}$ Assyrian shekel of gold, is readily tested on the recognized basis of 40 of silver being worth 3 of gold. According to this the Assyrian shekel $\times \frac{1}{6}$ should be equal to the Phœnician shekel. In the middle diagram, pl. I., we have the curve of the Assyrian unit so multiplied, both the Naukratite examples, and the curve of all the Asiatic examples (Syrian, Assyrian, and Babylonian) of the same unit; while the Naukratite Phœnician curve and the few examples of the same standard which I have

from Syria are compared with these. The general result is that the Asiatic Assyrian, though showing the same general range as the Naukratite, does not develop nearly so markedly in the higher values. In short the two great archetypes of the Naukratite were only general examples from Asia, without having much leading importance there. The Assyrian standard at Naukratis was then established in the country, and developed in families on its own account, and was not merely dependent on stray examples washed in by waves of commerce from Asia. This type is not nearly so strong at Defenneh, which seems therefore to have been more continuously supplied by the Syrian road. On looking to the Naukratite Phœnician, we see that though not in close conformity as to waves with either of the Assyrian curves, it is of just the same range and the same general position of the most frequent examples as those curves, which are here translated by $\times \frac{1}{6}$ so as to meet it on its own ground. The results from this are that the connection between the Phœnician and Assyrian had been quite lost before the Naukratite families arose, or they would be represented; also even before the Asiatic Assyrian families and curves. In fact, though its source is strongly shown by the agreement in the general range of the curves, we are bound to carry back the derivation of the Phœnician standard to a time remote in the history of the Assyrian standard. This shows that though to all appearances originating in the relationships of metals, it yet is far earlier than the introduction of a coinage, which in Syria and the East did not take place until during and after the age of the weights which we are now studying.

90. We now turn to another point, the origin of the 80-grain standard, as I have provisionally called it. I had suggested that it was derived by a binary division of the Assyrian shekel, or

a weight of 5 shekels, and supposed that it might be local to Naukratis. In classifying the Defenneh weights I refused to attribute to this standard any example, until it distinctly stood outside any other unit; and at last there was a collection outstanding, belonging clearly to this and not to any of the other standards. We therefore now see that it was more widespread, and we may well examine if it were a general standard. On comparing together in the lower diagram of pl. 1. the Naukratite Assyrian weights, and the Asiatic examples, with the 80-grain curve, it is seen that the general range agrees very nearly, and we are therefore warranted in attributing the origin of the 80-grain to the binarily divided shekel. But the 80-grain curve has none of the characteristics of the Naukratite Assyrian curve, probably it was not therefore derived in Egypt; and it agrees much more nearly to the style of the Asiatic Assyrian curve, its lower varieties being probably cut off by being attributed to the kat instead.

Can we then find any Asiatic connection with this standard? We perhaps have some traces of it in a series usually smothered over as a low variety of the Persian unit: Kilikian and Kypriote coins, and the Phœnician coins with a king's head and ship attributed to Aradus are of 160 grains or a trifle over that. Further on, referring to the tribute lists of Thothmes III., we find from the

| | Kats. | | Kats. | Means. |
|----------------------------|---------|---------|-------|--------|
| Asi, lapis lazuli | 1100 ÷ | 2000 = | .55 | } .556 |
| Naharaina, lead | 11000 ÷ | 20000 = | .55 | |
| Rutennu, gold | 558 ÷ | 1000 = | .558 | |
| Khita, gold rings, mean | 376.2 ÷ | 720 = | .523 | } .523 |
| Khita, gold tribute | 31443 ÷ | 60000 = | .524 | |
| Assaru, silver dishes | 1045 ÷ | 2000 = | .522 | |
| Assaru, block lapis lazuli | 209 ÷ | 400 = | .522 | |

And, in the offerings of Ramessu III.,

| | | | | |
|----------------------|--------|-------|------|--------|
| Electrum rings, mean | .526 ÷ | 1 = | .526 | } .529 |
| " " " | 1.84 ÷ | 3½ = | .526 | |
| " " " | 6.66 ÷ | 12½ = | .532 | |
| " plates, " | .4 ÷ | ¾ = | .533 | |

| | | | | |
|-----------------------|----------|--------|------|---|
| Silver crater | 1125 ÷ | 2000 = | .562 | } |
| " ladle | 277 ÷ | 500 = | .554 | |
| 4 " craters, mean | 144 ÷ | 250 = | .576 | |
| 31 " censers, " | 34.8 ÷ | 60 = | .580 | |
| 6 " vessels, " | 50.5 ÷ | 90 = | .561 | |
| 2 " tablets, " | 2870.5 ÷ | 5000 = | .574 | |
| 2 lapis lazuli blocks | 140.5 ÷ | 250 = | .562 | / |

Here we have a long series of quantities which are all irregular numbers of kats, but which are manifestly connected, and all agree to being simple multiples of a unit of about .55 kat, equal to about 80 grains. Taking the range of the kat as between 133 and 150 grains, the units found above will be respectively

76.6 to 83.2 grains.

72.1 " 78.2 "

72.8 " 79.1 "

78.0 " 85.0 "

Hence if these are all one standard, rather variously reported owing to the variations of the kat, it would be fixed to between 78 and 79 grains. Probably the Asiatic standard also fluctuated, so that if we say that it was between 77 and 80 grains we cannot be far from the truth. Now this is just within the observed varieties of the 80-grain unit, as that ranges from 77 to 83 grains.

Now it will be seen that this tribute is all Asiatic, and the silver vessels probably came from Asia, silver being the favourite metal of the Khita. Seeing that this comprises also the express tribute of the Khita, it might not be too bold to call the 80-grain unit in future the Hittite standard, and its presence in coinage attributed to Kilikia will the rather confirm this. This unit seems to have been known in later times as the Alexandrian drachma, on which was based the Alexandrian mina, and the Alexandrian "wood" talent; also a talent mentioned by Ælian.

91. At Defenneh we have for the first time obtained many sets of weights together; the outer chambers of the Kasr mostly contained three or four weights apiece, and in one spot in the camp the large find of seventeen weights was obtained. Hence we can at last ascertain

how far the variations we know of were not only contemporary, and in use in one town, but how much they were mixed together, and used side by side indifferently. Or, in other words, what amount of error was treated as negligible in ancient sets of weights. This is a question hitherto entirely untouched and unknown. The weights here referred to are all published in the preceding list, and hence it is needless to repeat their details; the list number, the true weight, the multiple and the unit is all that is required.

The large find (numbered find 58) in the camp contained the following weights; and as they are nearly all small, the balance errors will probably be more shown by them than the errors of standard (i.e. the absolute errors will be larger than the proportional variations); therefore the defections from a mean scale are stated, the mean (excepting the one heavy weight) being 144.5.

| No. | Weight. | × | Unit. | Error. |
|------|---------|---------------|-------|--------|
| 900 | 45.2 | $\frac{1}{3}$ | 135.6 | 3.0 |
| 936 | 69.9 | $\frac{1}{2}$ | 139.8 | 2.3 |
| 956 | 35.3 | $\frac{1}{4}$ | 141.2 | .8 |
| 989 | 143.3 | 1 | 143.3 | 1.2 |
| 995 | 143.4 | 1 | 143.4 | 1.1 |
| 1014 | 48.2 | $\frac{1}{3}$ | 144.6 | 0 |
| 1015 | 48.2 | $\frac{1}{3}$ | 144.6 | 0 |
| 1039 | 145.8 | 1 | 145.8 | 1.3 |
| 1042 | 73.1 | $\frac{1}{2}$ | 146.2 | .9 |
| 1046 | 146.6 | 1 | 146.6 | 2.1 |
| 1057 | 147.1 | 10 | 147.1 | |
| 1086 | 24.8 | $\frac{1}{6}$ | 148.8 | .7 |
| 1102 | 74.7 | $\frac{1}{2}$ | 149.4 | 2.5 |
| 1121 | 25.2 | $\frac{1}{6}$ | 151.2 | 1.1 |

Mean 1.3

It follows, then, no matter whether these weights were derived from different archetypes or not, that a balance variation averaging 1.3 grain was tolerated. Probably all these were derived from one archetype, since only the lesser ones, and of those only one-third of the whole number, fall outside of the important family shown in the curve by the rise from 143.5 to 146.5. If these weights had been miscellaneously collected together, their range of variation would have covered the whole kat range more widely; as it

is, only a third of them fall outside one family, and those may well be due to balance errors, as their mean divergence is only $1\frac{3}{4}$ grains. The one larger weight agrees also more nearly to this family than to any other, since the critical division between this and the next family seems (at Naukratis at least) to lie at 147.3, looking to the marks representing the weights (pl. 1.). With these were found

1170 15200 120 126.7

of the Assyrian shekel standard, and

1217 66.6 1 66.6
1226 134.6 2 67.3

of the Attic standard, showing a balance variation of much under a grain.

92. Of the weights found scattered in the camp there are two of a lower family, five of the same family as the above set, and three of the next higher family. They are—

897 45.0 $\frac{1}{3}$ 135.0
963 1420.4 10 142.0
1002 720 5 144
1017 14,460 100 144.6
1026 290.4 2 145.2
1034 728.8 5 145.7
1048 734.4 5 146.9
1068 73,830 500 147.7
1069 73,850 500 147.7
1074 148.0 1 148.0

Besides these were four of three other standards,

1176 7649 60 127.5
1246 126,120 600 210.2
1252 8606 40 215.1
1291 328.3 4 82.1

In the set of chambers at the N.E. and E. of the Kasr were the following weights, the bronze ones not being yet worked out.

| Chamber 3 | 1103 | 299.0 | 2 | Kats. 149.5 | Others. 80.4 |
|-----------|--------|--------|----|----------------|-----------------|
| | 1105 | 2994.5 | 20 | 149.7 | |
| | 1283 | 804.1 | 10 | — | |
| Deep in 2 | Bronze | | | — | |
| In 2 or 3 | 1070 | 739.0 | 5 | 147.8 | |
| | 1091 | 1487.8 | 10 | 148.8 | |
| | 1214 | 1325 | 20 | | 66.2 |
| | 1218 | 133.2 | 2 | | 66.6 |
| In 19 A | 1019 | 289.8 | 2 | 144.9 | |
| | 1046 | 293.3 | 2 | 146.6 | |

| | | | | | |
|-----------------|------------|--------|---------------|-------------|---------|
| | Bronze kat | | | | |
| | 1129 | 1527.0 | 10 | 152.7 | |
| | 1134 | 307.3 | 2 | 153.6 | |
| In 19 B | 997 | 287.7 | 2 | 143.8 | |
| | 1041 | 1461 | 10 | 146.1 | |
| | 1066 | 7379.7 | 50 | 147.6 | |
| In 19 c | 988 | 716.0 | 5 | Kats. 143.2 | Others. |
| | 1185 | 1287 | 10 | | 128.7 |
| | 1287 | 811.8 | 10 | | 81.2 |
| In 27 | 971 | 1422.8 | 10 | 142.3 | |
| | 976 | 1427.5 | 10 | 142.7 | |
| | 1032 | 291.2 | 2 | 145.6 | |
| | 1109 | 75.0 | $\frac{1}{2}$ | 150.0 | |
| In 17 | 926 | 138.8 | 1 | 138.8 | |
| | 1006 | 1442.8 | 10 | 144.3 | |
| | 1142 | 1557.1 | 20 | | 77.8 |
| | 1145 | 312.5 | 4 | | 78.1 |
| In 18 | 1028 | 48.5 | $\frac{1}{3}$ | 145.5 | |
| | 1065 | 295.2 | 2 | 147.6 | |
| | 1113 | 751.5 | 5 | 150.3 | |
| | 1261 | 9040 | 40 | | 226.0 |
| At 25 | 920 | 1384 | 10 | 138.4 | |
| | 1107 | 299.8 | 2 | 149.9 | |
| Another chamber | 973 | 47.5 | $\frac{1}{3}$ | 142.5 | |
| | Bronze kat | | | | |
| | 1010 | 28.9 | $\frac{1}{5}$ | 144.5 | |
| | 1116 | 50.2 | $\frac{1}{3}$ | 150.6 | |

Now reviewing these weights found thus connectedly, we see that in many cases there are close relations between them, not only of one family, but some almost identical in standard. In some cases two distinct families may be seen, as in 19 A, where there are the 145 and the 153 families together. On the later tell of Ptolemaic age were found together

| | | | |
|------|--------|----|-------|
| 1018 | 144.7 | 1 | 144.7 |
| 1081 | 1482.8 | 10 | 148.3 |

The other questions of forms and materials of different standards still remain to be examined after working out the 1600 bronze weights; but the present research has carried us forward a decisive step by proving the fixity and generality of the variations shown us by the curves.

CHAPTER XIII.

LEVELS AND MEASUREMENTS.

93. THE levels at Defenneh were taken by

sighting to the horizon over the top of the highest point; this from a purely arbitrary datum level was called 500 inches, and the levels of all points were recorded in inches above the datum, which is 500 inches below the highest point. Here the levels are classified according to their subject.

The original level of the sandy plain may be taken as about 227 inches above datum (i.e. $500 - 227 = 273$ below the highest point at present); the sand beneath the walls in chambers 8 and 36 being at this level, the sand between the mastaba and the fort being 230, and the sand beneath the mastaba about 235, which probably was raised a little; again the base of the outlying west wall being 220, probably built a little below the surface. The foundations of the fort were naturally sunk in the ground. The present sea-level according to Lake Menzaleh in May, when scarcely any Nile water runs into it, is 212, but in high Nile it rises to 227. This is probably much higher than in ancient times, for as 15 feet of mud have been deposited in the Delta since the twelfth dynasty alone, it is clear that the country must have sunk as well, or else the parts near the sea would have then been under water; the 8-foot rise of water so close to the sea as at Tanis since Greek times shows that a sinking of the country must have taken place along with the rise by deposit of mud. The whole Delta has apparently been slowly depressed by the weight of superimposed deposits, at about the same rate as those deposits have grown. Hence this sea level relatively to the sandy desert has risen considerably, and in some centuries more it may cover large tracts. The level of the plain at the lowest point to the east of the Kasr now is 222, over a mass of remains, which is below the high Menzaleh level; while the foundation deposits of the fort were two feet below even sea level. Nothing but the evaporation over a flat plain almost at water level keeps the water down enough for these to be reached. In a

few centuries more Tell Defenneh will be an island in Lake Menzaleh, like the many other tells which appear now in the water.

94. The ground level being 227, the foundations of the fort were sunk to 197 N.E., 190 S.E., and 187 at N.W.; the bottom courses retreated, however, inward, so that the wall face ended at 210 N.W., 209 N.E., and 197 S.E., or $1\frac{1}{2}$ to $2\frac{1}{2}$ feet below the ground. These and the deposit levels are shown in pl. xxiii. The sand beneath the mastaba is about 235, and the top of the mastaba varied from 268 to 272, mean 270, or $3\frac{1}{2}$ feet above the general ground. The north wall of the mastaba reaches down to 199, being a retaining wall for the whole mass. The raised road along the west of the palace up to the entry is 277. The levels of the sand in different chambers, &c., is as follows:—In 36 and 8, beneath wall, 227; between mastaba and fort, 230; in 9, beneath wall, 251; in 42, 254; in 4, 259; in 41, 260; in 22, 260 beneath walls; in 43, from 275 at south to 340 at north end; and in 38, 299 inches: these are evidently the sand fillings in the latter instances, put in to fill up the chambers. The laid floors are in 45, 245; in 22, 265; threshold in the north of chamber 18, 269; in 4, 271; in 45, a higher pavement at 279; in 11, 283; in 10, 284; the stone sill of 11, and plastering on the walls of a later date, 331; the stone sill of the entry, 351; the mortared floor of the entry court and passages, 368: this last is the only piece of true floor of the palace itself which remains. Thus the outlying offices stood at about 2 to 5 feet above the ground level, and the lowest passages of the palace at about 12 feet above the ground. The present highest points when I went to Defenneh, on the worn-away surface of the ruins, were rubbish on south of mastaba, 310; general level on west part of fort, 324; on east part of fort, 329; along south side of fort, 342; and in middle, 349; at the N.W.

corner of the fort, 410; at the S.W., 414; at the E. of chamber 44, 425; at the N.E. of the fort (period A), 448; at the S.E. of the fort, 498; and the highest point of all just west of chamber 22 was 500 inches above datum. Judging from the beginning of doming, to be seen in the highest parts of the cells of the fort, it seems probable that it rose originally to at least 500 in. before being closed over into a uniform platform, on which the buildings of the fort proper were placed. Those buildings were very probably 20 feet in height, at least to the watch tower, which would thus rise more than 60 feet above the plain. It would thus easily communicate with Kantara, Tell Ginn, and Tell Sherig.

95. The sizes of the bricks were noted in different parts of the Kasr: they are, in the great square of the fort, period A, taking the mean of two or three examples,

| | |
|---------------------|--|
| E.N.E. side | $16\cdot2 \times 7\cdot9 \times 4\cdot9$ |
| S.S.E. side | $16\cdot3 \times 7\cdot8 \times 4\cdot5$ |
| W.N.W. side | $16\cdot4 \times 8\cdot1 \times 4\cdot2$ |
| Mid-chamber | $16\cdot6 \times 8\cdot2 \times 4\cdot3$ |
| Above that | $17\cdot4 \times 8\cdot2 \times 4\cdot2$ |

The mid-chamber is the deep square chamber below the large south chamber, and the bricks above that are those of the large south chamber itself. These are erratically long, and excluding these, we may say for the

| | |
|----------------------------|--|
| Fort, period A | $16\cdot4 \times 8\cdot0 \times 4\cdot4$ |
| Entry court, period B . . | $17\cdot2 \times 8\cdot7 \times 5\cdot1$ |
| „ „ additions | $16\cdot1 \times 8\cdot0 \times 5\cdot0$ |
| „ „ period C | $\begin{cases} 16\cdot0 \times 7\cdot8 \\ 16\cdot5 \times 8\cdot0 \end{cases}$ |
| „ „ period E | $16\cdot1 \times 8\cdot0 \times 4\cdot2$ |
| N. of E., period F | $16\cdot1 \times 7\cdot8 \times 4\cdot1$ |
| Wall round 19, period F . | $13\cdot2 \times 6\cdot8$ |
| Chamber 8 (Psamtik I) . . | $14\cdot2 \times 7\cdot1 \times 3\cdot5$ |
| Wall between 8 and fort . | $15\cdot2 \times 7\cdot3 \times 3\cdot7$ |
| Walls S. of fort | $16\cdot4 \times 8\cdot1 \times 4\cdot5$ |

All of these are known to belong to the earlier part of the twenty-sixth dynasty, and show well how much variation may be expected in various lots of bricks of the same general period. The usual sizes of $16\cdot4$ agree closely to those of bricks of the same age at Kom Afrin $16\cdot3$, and Naukratis $16\cdot3$, while those of Sais agree to

the longer length of 17·3. The only erratic sizes are in chamber 8 and the walls by it, and in the wall around 19; and these warn us that the sizes, though generally a close indication of age, may be in a few cases rather below the standard. The walls of the building down by the caravan road are of bricks measuring

$$15·9 \times 8·7 \times 5·0$$

which seem to be therefore of the same age as the Kasr.

The red baked bricks beneath the mastaba, of Ramesside age probably, are

$$12·5 \times 6·2 \times 3·1.$$

NOTE.

The transliteration of Egyptian words and names varies so much in the usage of the best scholars, that any single system which could be followed would be but in a small minority. The only system ever formally agreed to by authorities in general is perhaps less followed than any other. Persons not familiar with the literature of Egyptology readily suppose that *some* system must prevail, and may therefore be confused by finding a different name to what they happen to be familiar with. I have therefore put together here some spellings used in the best authorities in recent years (and others that are familiar) for various of the names occurring in this volume; premising that many writers use two or three forms of the same name according to the style of their subject. I usually follow the spelling most familiar to English readers, except in cases where it incurs the use of Greek perversions. The letters denote the authors: B, Birch; Br, Brugsch; E, Ebers; G, Gardner Wilkinson; L, Lepsius; M, Maspero; P, Pierret; R, Renouf; W, Wiedemann.

Aahmes, B, E, G, R; Aahmas, L; Ahmos, M; Amasis, B, G; Ahmes, W; Ahmès, P.

(Pre-nomen Ra-nem-ab, or Ra-knum-ab.)

Amen, B, E, G, M, W; Ammon, E, M, R; Amon, Cook; Amun, L.

Amenemhat, E, G; Amunemhat, G, L; Amenemhāt, M; Amenemha, P; Amenemhā, W.

Ameniritis, M, P; Ameneritis, G, W; Amuniritis, L; Amenartas, R.

Hat hor, E, M, P, R; Athor, G, R; Hāt hor, W. Horus, P, R; Hor, P, R; Har, B, R; Hōr, W. Hotep, B, L, P; hetp, R; hotpou, M; hotep, E; hetep, W. Khem, E, G, P, R; χem, P; Chem, W; Min, M; Ames, R. Khnum, E; Khnoum, M, P; χnum, P; Chnum, W, R; Knum, G.

Khonsu; Khons, B, E, G, P; χonsu, P; Chonsu, R; Chunsu, G; Khonsou, M; Khunsu, E; Chons, R.

Khita, B; Cheta, W; χeta, P.

Merenptah, P, W; Mineptah, M; Meneptah, E; Mienptah, L; Menephthah, R.

Nekht-har-heb. Next-hor-heb, P; Necht-Hor-heb, W; Necht-har-heb, R; Next-har-heb, L; Nakht-hor-heb, E.

Neit, P, W; Neith, G, R; Nit, M; Net, Br.

Nekau, L, R, W; Necho, R; Neku, P; Neko, M; Neqo, E.

Nofer, E; Nofir, M; Nofre, R; Nefer, Br, P, R, W; Newer, P.

Piankhi, E; P-anχi, P; Pianchi, W; Piōnkh, M; Panχi, L.

Psamtik; Psemtek, W; Psametik, E, P; Psamitik, M; Psammetichus, G, R.

Ptah, B, E, P, R; Phtah, M, R; Ptah, W.

Siamen; Siamoun, M; Sih-, E; Se-, P; Sa-, Br, W.

Sekhet, E, R; Sechet, R, W; Sokhit, M.

Sheshank, P; Sheshonk, G, P, R; Sheshonq, E; Shishonq, M; Scheschenk, W; šešanq, P; šešonk, L.

Tahuti, L, R; Thoth, R; Tahuti, E; Thuti, W.

Tum, G; Toum, M; Atum, G; Atmu, R; Tmu, R.

Uah-ab-ra, P, R; Uahbra, G; Uahabrā, E; Uahābra, W.

Uati; Uat, R; Uatī, W; Ueti, P; Uedji, P; Bouto, M.

Usertesen; Sesurtesen, L; Usortesen, E; Usertsen, R; Osirtasen, G; Ousirtasen, M.

Ushabti (or shabti also in hieroglyphics). shabti, R; ušabti, šabti, ušebti, šuabti, P; uschebti, W.

The above will serve as a sample of what may be easily extended as to authorities, and carried throughout Egyptian words.

CHAPTER XIV.

QANTARAH.

By F. LL. GRIFFITH.

96. For four weeks from the middle of April I was at Qantarāh, the village at which the caravan route to Syria crosses the Suez Canal. It is quite modern, dating from the time when the canal was begun. The houses and hospital run up at that time for the engineers, and built chiefly of materials obtained from the neighbouring tell, now stand deserted a quarter of a mile E. of the canal, the little village having grown up since on the E. bank. It is a wealthy little community, owing its existence to the canal, and its comparative prosperity to the crossing of the caravan route. It consists of government

offices, a mosque, and a well-furnished Arab market, together with such huts and houses as are necessary for those who keep them going. On all sides is the desert with its meagre vegetation, or the salt marshes which support no life but wild fowl. The inhabitants, with characteristic indolence, which has spread also to the Europeans amongst them, have never looked into the desert; their interest lies solely in the market-place and along the canal. It is therefore impossible to obtain information from them of any value either as to the geography or to the past history of the district round. A telegraph wire is carried along the Arîsh road to Syria, but although an engineer has continually to pass backwards and forwards between El Arîsh and Qanţarah, no survey was made for it, and little or no information can be obtained in this direction. Maps of this district are not to be trusted. The scanty Bedawîn are the best guides, and except where otherwise stated, I have seen everything that I record with my own eyes.

In Qanţarah, near the west end of the old Canal Company's buildings, stands a peculiar monument of sandstone, inscribed with the name of Rameses II., his father Seti I., and his grandfather Rameses I., and dedicated in the "house of Horus." On walking to the mound two miles E. one finds remains of a similar monument, likewise mentioning Rameses II. and Horus, Lord of Mesen. On this spot then was a temple of Ramesside epoch. However, a fortnight spent in trenching the mound produced nothing further that was certainly of a period earlier than the later Ptolemies, nor were any more hieroglyphic inscriptions discovered. The rubbish was exceedingly shallow; a few trenches reached a depth of three metres; 1 to 1½ metre was sufficient to bring up desert sand in most parts, and often even near the centre the sand was practically at the surface. This proves a short occupation; nearly all is

Roman, so the previous occupation must have been very short indeed.¹

The mound lies two miles E. of the Suez Canal, slightly N. from Qanţarah, and three-quarters of a mile S. of the present caravan road. The southern side is bounded by the dry bed of Lake Balah, and the dry bed of Menzaleh on the N. and W. is less than two miles away. Thus there were marshes on three sides, and the title "Lord of Seshu," or the marshes, given to the local god on one of the monuments, is not an inappropriate one, notwithstanding the dry and desert appearance of the district at the present time in spring.² On the whole of the eastern side from N. to S. the desert hills rise conspicuously, skirting the Balah lake and the marshes of Pelusium.

The mound measures from N. to S. 500 yards, from E. to W. 700. The Ramesside blocks lie near the centre, and close to them I found the square limestone base upon which one of the monuments had been raised. It measured 58½ inches square, and was built up of separate blocks. Round it at two levels were traces of pavements, made of small chips and fragments of limestone cemented together. The lower pavement was 40 inches below the top of the base. Seventy-nine feet E. of this I found a recumbent lion, natural size, in limestone, the head turned eastward to the right, the left paw crossed over the right. It was in bad condition, and without inscriptions. There were also considerable remains of rubble pavement, with occasional

¹ It is not necessary to suppose that the Ramesside monuments were brought here to adorn the Roman camp. The early settlement, which probably existed only for a short time, may have been entirely destroyed, and being abandoned for seven or eight centuries, the brick foundation in the sand, even if not removed to clear the ground when new buildings were erected, might itself be carried away by wind and rain. The bricks everywhere were small, 13 inches being the largest measurement.

² The cutting of the Suez Canal below sea level having drained considerable tracts on the E. side.

squares of fine limestone measuring about 80 inches, apparently bases of monuments.

The mound had been much trenched at the time of the excavation of the canal, partly perhaps for antiquities, partly for the sake of the limestone and burnt brick. A large well, which doubtless supplied the settlement with brackish water, was at that time completely excavated and stripped of its limestone lining: this was S.W. of the sandstone blocks, which were discovered at the same time.

97. Near the well I found fragments of a limestone slab which had been broken up and used for paving-stones. Upon it was a Latin inscription dating from the joint reign of Diocletian and Maximian, and recording the dedication by these emperors of the camp of the first ala of the Thracian cavalry, termed the Mauretanian on account of some honourable service in North Africa,¹ to Jupiter, Hercules, and Victory. Latin inscriptions are rare in Egypt, and it is curious to find published in the *C. I. L.*, vol. iii. p. 8, an inscription from a basalt block built into a Coptic church near Manfalût,² in which the camp of the first cohort of the Lusitanians, distinguished as the Augustan prætorian (Cohors I. Aug. prætor. Lusitanorum), was dedicated in the same year by the same emperors to the same deities.

The explanation may be found in history. It is well known that when Diocletian had raised Maximian to the position of his colleague in the Empire, and had entrusted him with the western part of it, he turned his own attention

especially to strengthening the eastern frontier. We find this aim referred to in the inscription in the words *providentiâ suæ majestatis* (in forethought for the safety of their majesty). And as to the dedication, we know that Diocletian styled himself Jovius, as being supreme in council, and Maximian Herculus, as being a brave soldier. Thus it is clear that we have here the settled form of dedication in that year in Egypt.

The inscription is dated in the third consulship or year of Diocletian, giving the approximate date of 288 A.D. The revolt of Egypt under Achilleus had to be suppressed eight years later.

From the largest fragment it appears that the inscription was painted red. The forms of the letters are mixed. The A is distinctly Greek, except in one case where the engraver has followed his Latin model more closely. I have completed the inscription in the plate by dotting in words from the Manfalût inscription. Where the two can be compared they agree exactly, except in the abbreviations and the name of the garrison.

The inscription does not give us much assistance in determining the classical name of the place. The dedication being a fixed one can have no bearing on the local worship; and as to the garrison, the *Notitia Dignitatum*, enumerating the imperial offices in the time of Constantine, mentions Pelusium, Sella (Sile of the Itinerary), Thaûbastus, and perhaps other posts on this line as occupied by cavalry; but the Thracians are not named amongst them. The fact of a garrison being stationed here does, however, strengthen the proof of its being Sile.

In the mound itself there were remains of a thick wall of unbaked brick that seemed to be continuous for more than a hundred yards on the north of the centre. This may have been part of the camp enclosure of Diocletian.

Besides this inscription, I found a fine bronze vase in the form of a female head with inlaid eyes of glass, of good Roman work, kept at

¹ This ala is also mentioned in an inscription of the year 199 A.D., found at Ramleh near Alexandria. The *decuriones alares* of the *Ala veterana Gallica* and the *Ala I. Thrac. Mauret.* dedicated a statue to Septimius Severus. The first of these was stationed at *Rinocolura* (El Arîsh) when the *Notitia Imperii* was drawn up. Perhaps one may suppose that these garrisons were not changed for a century, and that the officers of the two frontier stations on the land route between Egypt and Syria clubbed together to set up the statue of Septimius. The *Notitia* places the *Ala I. Egyptiorum* at Sella (Sile).

² *Dêr el Gebrawi*, Murray's Egypt, 1880, p. 422.

the Bulaq Museum. Also of bronze, a slender knife, a figure of Osiris, a small bell (for horse's trappings?), a girdle-fastener (hollow triangle with button at the apex), cylindrical socket with traces of wood inside, perhaps the ferrule of a standard. Of glass, fragments of a large bottle? in the form of a bird of dark blue, and a Roman bottle of clear glass. Several disks of porcelain and rings for bronze rods. Earthenware moulds for glass hieroglyphs, knotted cord θ , and cynocephalus. Large mould for earthenware, of limestone. Large porcelain feather *maā*. Several pieces of limestone squared for sculpture, on one a lotus flower was delicately drawn in black ink. Coins of the latest Ptolemies were abundant.

98. Amongst the deserted houses of Qantarah are to be seen several limestone coffins of the usual Roman type. The cemetery from which they were taken is very extensive, stretching N.E. from the old hospital at the eastern end of these houses, where there is also the modern cemetery, for about half a mile.

The more distant half of this is full of interments. Some of the bodies, none of which are mummified, have been enclosed in coffins formed of two jars joined in the middle, measuring 6 feet in length, with blunt ends, wide in the middle; some in terra-cotta coffins rounded at the ends with flat base and cover. Some are laid at length in the sand, some apparently in a crouching position, some again gathered under half a large jar broken longitudinally. Others again were laid either with or without stone or terra-cotta coffins in constructed chambers of brick or stone rubble. The bricks are both burnt and unburnt, measuring 5×10 inches. All these seem to belong to a very late period, and are apparently without antiquities. I trenched in all parts of the cemetery without finding anything more than the interments, which were always undisturbed except where M. Paponot had excavated pre-

viously, or where the limestone had induced the Arabs to dig for building materials. This cemetery in fact, from its size and position, would seem to belong to the caravan route as much as to the town, from which it is three-quarters of a mile distant at its nearest point.

99. I proceed to give a list of sites¹ in the neighbourhood.

Tel Farama (F.² gives a good idea of the form and position of the mounds, Eng. quite wrong), the ancient Pelusium, consists of two principal mounds, about three-quarters of a mile from the edge of the desert on the E., but completely surrounded by marsh. The mounds are narrow, stretching $1\frac{1}{2}$ miles or more from E. to W. in a straight line. The E. mound is small, but high; an Arab fort 120 yards square completely occupies the summit. Details of the plan of this building could probably be easily made out by excavation, as the lower part is well preserved. Between this and the W. mound a considerable space intervenes, through which a canal or perhaps the main stream of the Pelusiac branch ran. The second mound is long and narrow, well defined, but sloping gradually down on all sides to the marsh level, except where the Arab citadel (see French map) in the centre of the N. side rises abruptly from the edge. The N. and S. walls of this measure about 360 yards, the E. and W. about half as much. The principal gateway is on the N., near the E. end, where a narrow mound (not

¹ Place names are always difficult to collect, and at Qantarah they are particularly so, since the population is very scanty, and the sites are often at a distance from the beaten tracks, and seldom passed even by the Bedawin. Tell Dahab and Tell Fadda, which were the names applied to the mounds of Pelusium by Mr. Chester's guide, who came from Salhiyeh, I often heard of at Nebêsheh. But they were semi-mythical names, and the Bedawin about Qantarah only once mentioned Tel el Fadḍa, by which the mound E. of Pelusium was perhaps intended. Tel Farama was known by report to every one at Qantarah. Tel el Daḥab I never heard mentioned there.

² "F." refers to the Atlas Géographique of the French "Description;" "Eng." to the Map of Lower Egypt issued by the English War Office.

marked in F.) runs out northward nearly 300 yards, perhaps for quays. Starting now from the extreme W. end of the principal mound, we first travel along a narrow projection 800 yards in length, of uniform breadth, and only 30-90 inches above lake level. This seems entirely without Arab remains, but Roman red brick occurs at the extreme end. On it may have been built the quays and warehouses of earlier times. No large blocks of stone are visible upon it. At the E. end of this tail the mound widens and rises much higher with Arab walls and forts. At the junction there seems to be a gateway. Immediately W. of the citadel is a large depression, in the centre of which lie several columns of granite, making three sides of a rectangle, probably having been rolled against the sides of a building which has now vanished. They lie half buried, probably three metres above lake level. They are all of red granite, and so much weathered as to make it difficult to decide their original form.

Outside the citadel gate lie two granite blocks about the centre of the projecting arm. E. of the citadel about 150 yards are two groups of grey granite blocks. Beyond on the N. side of the mound lie four red granite columns parallel and close to each other, evidently rolled together by the mediæval inhabitants in some open space in the town (as one sees them now at Rosetta), and after its desertion denuded by wind and rain, and left lying high and exposed. They are large, but apparently of Roman date. S. of these is a depression with columns and blocks of grey and red granite almost buried, scattered over a space of 150 yards square. This is evidently the site of the principal temple. Further E., near the end of the mound, are small blocks of a basalt similar to that used in the pavement of the great pyramid. In a depression on the N. are two small columns.¹

¹ Tel Farama is probably best visited from Qantarah at end of April or beginning of May. The air is then cool with

It is much to be regretted that no inscriptions remain on the surface. The numerous granite blocks are so weathered that not a trace of "working" remains, except where a column or square block has been polished with an even face. The level of the country has no doubt changed greatly, and remains would be found far below the level of the marsh, which now dries in spring. Another reason of the low level of the mound lies in the denudation by rain, which must go on here to a greater extent even than at Şan and Defeneh. It would be of great value to learn the ancient name² and earlier history of Pelusium, the frontier city in which Phœnicians, Persians, Cypriotes, Carians, and Ionians met with the Egyptians in peace or war a thousand times. Perhaps, too, the Hyksos and Assyrians may be added to the catalogue of Eastern nations who struggled for the possession of this "key of Egypt," but classical historians can take us back with certainty only as far as the beginning of the Saite dynasty, and then Daphnæ was made the frontier fortress, garrisoned, as it appears from the remains, by Greeks and Carians. The notices of Pelusium as the chief object of attack before this time may be due to misconception of the condition of the times or inaccuracy.

This is one of the questions which would be solved by excavation. There is no doubt of

N. winds, and the marshes are almost dry, but there is a heavy dew, and occasionally rain. The distance can easily be accomplished in a day with a camel, passing Tel el Hêr. A supply of water should be taken, as none can be obtained on the journey fit to drink. The place is quite deserted. In the desert E. of Tel el Hêr the Bedawîn pasture large herds of breeding camels with their young, but no milk can be obtained. Only in the date season do Arabs pass Tel Farama on their way between Port Said and the scanty groups of palm-trees in the desert. There was only one camel to be hired this year at Qantarah.

² The Coptic name of Pelusium, ΠΕΡΕΜΟΥΝ, was perhaps the source of the Arabic name Farama, and possibly represents the hieroglyphic (*p*-)ru-men. Nothing, however, is known of this Prumen, except that it was situated in this part of the Delta, and even the reading of the name is uncertain.

the importance of the city as early as Herodotus (Hdt. ii. 141).

Along the coast N. of Pelusium is a strip of sand with vegetation. A fort N.W. is called by the Arabs El Belâha (Qala'et et Tineh of the French map). N.E. are two or three low mounds, in the lake. There is a very small mound about 1 mile S., covered with Arab brick, evidently a guard-house on the river or canal, which passed between the two main mounds.

100. *Tel el Fadḍa* is said to be the name of an insignificant mound 30 yards square in the desert opposite Tel Farama, situated where the hills begin to rise from the marsh level.¹

Tel el Hêr (F. Hêr; Eng.), a small shallow mound next in point of size to that at Qanṭarah. It stands on the S. side of a spit of sand running westward into the bed of the lake. Mr. Greville Chester's map shows its position most correctly. It is conspicuous for a high mediæval fortress of red brick at its E. end, about 100 yards square. Tel Farama is partly visible from it, partly shut off by intervening sand heights.

Tel Habwe, on the S. side of the caravan route; a small heap of red brick on the sand, 20 yards square, and very unimportant in itself. However, it is a landmark from its colour to the caravans, and is worth noting, as it occupies the place of the "Tel Semut" of the maps, which has been the subject of several identifications. The latter name is quite unknown here, as it was to the French expedition, who only dot in surface ruins here on the map. A mound on the road between Qanṭarah and Salhiyeh, as well as the name of Qanṭarah, "the bridge," is connected by the natives with Ibrahim Pasha's expedition to Syria (inf.). Both of these mounds, however, I suspect, are guard-houses of an earlier date.

¹ Mr. Chester, when he visited this part of the country in 1880, was informed that this was the name of one of the great mounds of Pelusium. This is much more probable.

Tell abu Sêfe, called "Old Qanṭarah" (*Q. el Qadime*) by the inhabitants of the modern village, is the mound E. of Qanṭarah. It is not marked in the French map in its proper place. The large mound (marked *Ruines*), 3 or 4 miles S. of its true position, is perhaps intended for it.

Qanṭarah "bridge" (F., Qanâtir), is called invariably *Qanâtir* "bridges" by the inhabitants of the neighbouring villages on the W. This must therefore have been the old name of the crossing, which seems to have been only a few hundred yards S. of the modern village.² As *Tell abu Sêfe* lay on the S. side of the N.E. end of the isthmus between the lakes, so a small station represented now by a low nameless mound on the northern edge seems to have guarded the south-west end. It is difficult to reconcile the details of the French map with the present appearance of the place. If the place is carefully gone over map in hand, it will, I think, appear that much that is marked as marsh was really sand. About a mile farther along the road is the heap known as *Qahwet Ibrahim Basha*, "Ibrahim Pasha's coffee-house." The road then passes by a southern outlier of Defeneh (F., *Tell Defeneh*) to Salhiyeh. This succession, T. Farama, T. el Fadḍa, T. el Hêr, [T. Habwe,] *Tell abu Sêfe*, *Qanâtir*, the nameless mound, [Qahwet Ibrahim Basha,] Defeneh, seems to mark the land route from Pelusium. It seems strange that so important a point as the passage between Lakes Balah and Menzaleh should have been left unguarded from the time of Rameses almost to the Romans, but the history of his important corner of the Delta and of the desert E. of it, as well as the whole question of the ancient routes, is as yet too little known for one to venture on much speculation.

There is nothing of importance S.E. of this line.

² This is confirmed by the name *Qanâtir* in the French map, where two channels from Menzaleh to Balah are marked as crossed by the caravan road. Abu Aṣab is the name of a conspicuous hill, visible even from Defeneh, and lying perhaps 15 miles on the caravan road from Qanṭarah.

Only S.E. of Tel Ḥabwe, by the side of half-a-dozen palm-trees, there are the remains of a few red-brick and other buildings. On the other hand, N. and N.E. of Qanṭarah the ground is frequently strewn with fragments of pottery. The occurrence of large stones for corn-grinding, &c., shows that there must have been in some cases settled villages.

These remains often stretch far into the dried-up marsh. A difficulty in ascertaining the course of the ancient canals and river-beds in this region lies in the complete silting up of the lake. We know from the fact of village remains occurring in abundance in places which have evidently been under water all the winter, as well as from other indications, either that the drainage of the land has been stopped, or that the surface has sunk. We know also from classical authors that there were lakes and swamps all over the district in early times. The canals of such a district would require continual attention to keep them open. We know even that a navigable branch of the river passed this way, and yet in spring the whole is a stretch of barren salt sand, the level of which to the eye is absolutely uniform, although a difference in consistency betrays slight variations of level to the foot: for instance, round the edges of Tel Farama the current formed by the obstruction has left a space of 20 yards in breadth, perhaps 3 inches lower than the rest. Under such circumstances it is hopeless to look for channels.¹ The only method is to seek for lines of mounds, natural or artificial, which would exclude a channel or would mark sites upon its banks. Thus, I think, a channel may be traced past the low mounds N.E. of Tel Farama, and between the eastern and western mound, past the small red-brick mound S.W., past another low mound visible from Tel el Ḥêr, past a sand island, and another low mound

4 miles N.W. of Qanṭara,² and into the canal that skirts the N. edge of Defeneh. This canal, now known as the Baḥr el Baqar, or "canal of the cow," is certainly artificial, as may be gathered from its running through sand for at least 9 miles near Defeneh. The Pelusiatic branch, on the other hand, running W. of Heracleopolis, seems to have turned to the N. a little before reaching Defeneh.

In the Itinerary of Antoninus, from Pelusium to Memphis, Daphno is the first station mentioned. It therefore followed this channel or "short cut," by the side of which a road probably ran through the marshes at that time. The road from Serapiu (at the E. end of the Wadi Tumilât) to Pelusium is given as *a Serapiu Pelusio*, lx. (xl.).

Thaubasio (Thausasio), viii. (viii.).

Sile, xxviii.

Magdolo, xii.

Pelusio, xii. (xv.).

Thaubasion, a place of some importance in Roman times, has not been identified, and no likely place is marked on the maps. The identification of Sile with Tell abu Sêfe may remain. Magdolon was formerly identified with Tel Semut. The latter, however, does not exist. Tel el Ḥêr is more probable. It stands on the direct road, 11 or 12 miles from Tell abu Sêfe, and 6 from the E. end of Pelusium, which is

¹ The French map, however, marks a distinct channel W. of the Pelusiatic mouth. Some traces of this may exist. I did not visit that part.

² From this mound there is still observable a peculiar line (an artificial roadway?) strewn with pottery, running S.W., and cutting the Suez Canal close to a group of deserted houses. I picked up on the mound a late Ptolemaic coin. I found also two double corn-grinder stones of a peculiar form, being shaped like a doubly-concave vertebra and pierced: diameter 18 inches, length 14 inches. On each side is a hollow handle forming a square socket, the sides of which are pierced with a small hole parallel to the circumference of the stone. The socket must have been for the insertion of a wooden lever fixed by a thin rod or wire through the hole. It was then evidently worked on a convex stone, the upper bowl being kept full of corn. The material resembles slag. One of the convex stones for a similar mill lies on the mound N. of the canal at Defeneh. (See Plate li.) No doubt these are Roman, and the material is perhaps trachyte from Syria.

the nearest on the desert road. These distances would be more correct than that given for Daphno (xvi., really about xxvi.) from Pelusium. The Arab fort at Tel el Hêr, which is by far the most important in appearance on the road, may very well stand on an earlier structure of the same kind, called by the Semitic name Magdolon (Migdol,¹ or "tower"), which would point to an early date.² South of Qanṭarah I have nothing to record. There is said to be a ruin "as of a single house" near the canal W. of Lake Balah, but I could not find it, nor did I find any pottery on the sand in that direction.

The name Tineh given to the mounds and neighbourhood of Pelusium in some maps I have never heard, but I am not sure that it does not exist. In an early Arabic dictionary the name is applied to a fort near Farama, and in the French map to the fort El Belahah. I heard of no more mounds in the W. portion of the lake cut off by the Suez Canal.

101. I will now proceed to describe the hieroglyphic monuments at Qanṭarah and Tell abu Sêfe. I saw in all five fragments of inscribed sandstone, belonging to two monuments. The first of these monuments, a large part of which now stands in Qanṭarah (see pl. li.), was copied

¹ A *makṭar* (migdol) of Seti I. in the neighbourhood is represented on the route of his triumphal return from Canaan at Karnak. This seems to be the Migdol of the prophets, which they speak of with the town of Seveneh (Syene) as a boundary of Egypt. It was, no doubt, the first place in Egypt reached on the northern road from Syria. See Ez. xxix. 10 and xxx. 6; Jer. xlv. 1 and xlv. 14. It probably differed from the Migdol of the Exodus, which must have been on the southern road through the Wadi Tumulât.

² Another route from Pelusium is across the Delta past Tanis and Thmuis.

Pelusio.

Heraclius, xxii.

Tanis, xxii.

Thmuis, xxii.

Tell Belim (Tell esh Sherig, Eng.; Tell Sehrig, F.), visited by Mr. Petrie, is an important mound lying between Pelusium and Tanis, and must be Heraclius or Heracleopolis. This place was capital of the Sethroite nome, according to Ptolemy, and the nome and city lay outside the Delta, i.e. E. of the Pelusiatic arm.

by Prisse (or a friend of his) when it was in a much more complete state, and with the help of his plate (Prisse, Monuments, pl. xix.) I have been able to make almost a complete restoration of it.³ On an oblong rectangular base, 21½ inches high, 32 inches broad, and about 40 inches long, stood a kind of truncated obelisk, about 5 feet high, the faces sloping slightly inwards, and crowned by a cornice. On the top of this stood a colossal hawk, the figure of the god Horus. There were inscriptions on each face and round the base. Above the inscriptions were scenes of offering. The details of these are as follows:—

Front (Prisse, Monuments, xix. 3). Scene. Seti I., wearing uraeus, presents two vases to

³ Three fragments remain. The portion that stands in the village shows the back as in the plate. The front is completely broken away, but portions of the eight lines of inscription shown in Prisse remain on the right side, and seven on the left. The greatest length that remains is 35 inches. Prisse figures the front, back, and left side of the obelisk (the left side only repeating the inscription of the right), but omits the inscription on the left side of the base, which is necessary to complete the sense. His figure is misleading, as the monument appears much more broken in the plate than it really was. Probably he had never seen it himself. His copy of the inscription is fairly correct, but is again misleading in the front of the base, where *ânḫ ḥor qa next mā mr* and *ânḫ sut ḫbt Râ user mā soteṭ n rā* should be read in the two lines, starting in the centre and running both ways. The top was lost in Prisse's time, but fortunately one of the remaining small fragments on the mound shows part of the throne name of Rameses II. and part of the title of Horus in front of the double crown of a figure of the god, probably from the scene on the back. The sides of this fragment slope, and there is therefore no doubt of its belonging to the same monument. Above the titles is the cornice and a portion of the worked top, which is flat and polished for a few inches from the edge, after which is an irregular rise, where something has been broken off. This is evidently the last trace of a figure upon the top, which from the shape of the base and from the dedication to Horus must have been a hawk. Thus we can restore the monument completely. The only question is whether Rameses II. did not take the place of Seti on the left side. No other monuments were visible in Prisse's time (1840). "Abou Seyfeh, l'ancienne Migdol ou Magdolum, ne présente plus aujourd'hui que des monticules couverts de tessons de poterie, parmi lesquels on voit les fragments d'une superbe monolithe. Il est de grès ferrugineux et couvert de hiéroglyphes bien taillés." The second monument was probably found by M. Paponot, one of the engineers of the Suez Canal.

Horus, lord of Mesen, who stands on a low pedestal, and holds emblems of life and purity.

Inscription. Titles of Seti I., beloved of Horus, lord of Mesen. "He set up his image of good and enduring work. Behold, the desire of his Majesty was to establish the name of his father, King Rameses I., before this god for ever and ever."

The scenes and inscriptions on the two sides appear to have been similar. Prisse gives the remains of the scene on the right, representing Rameses I. crowned with the *atef* (*ntr nfr rā men ph*) kneeling before a figure enthroned, of which the upper half is lost (perhaps Tum or Harmachis). Behind Rameses stands "Horus, lord of Mesen, lord of heaven," hawk-headed, holding in his right hand the palm branch, symbol of many years, in a slanting position. Behind Horus is Uati, "mistress of heaven, regent of the gods," crowned with the disk, horns, and uraeus. Prisse has evidently completed some of this from the duplicate on the left.

Below the scene were eight narrow vertical lines of inscription. The first two lines contain the name and titles of Seti I., "beloved of Horus, lord of Mesen, *m des ā*." ll. 3, 4. "He made this as his monument to his father, Horus, lord of Mesen, *m des ā*, setting up his image of a great stone (of Gebel Aḥmar)¹ of excellent workmanship to last for ever: acting as a son who does what is generous, and searches out what is fitting."² The fifth line addresses Rameses I.; the last three are the grants to him from Harmachis, Tum, and Horus of Mesen. Harmachis promises health and happiness; Tum promises food of all kinds, and Horus of Mesen promises long life, with dominion over all countries.

¹ *m bat āat* on one side. Mesen with and without the *n* written, and *Rā men peḥ* = *Rā men ph ph*, are the most important variants in the remains of the inscriptions on the two sides.

² *t'ār bu āger*.

Back (see plate). Scene, apparently, Rameses II. offering to Horus of Mesen.

Inscription. "The Horus, mighty bull, &c. Rameses II., beloved of Horus, lord of Mesen, carved (this) monument of his father, Seti I., making the name of his grandfather, Rameses I., live in the temple of Horus."

Inscription round base in two lines, beginning in the middle of the front, and running each way.

Left side 1. *Ānχ ḥor qa next (maū mrī nexebt uat) māḳ Qamt uāf set, sut χbt Rā user maū stp n rā se rā Amen mrī, &c., mā rā.*

Left side 2. *Ānχ sut χbt Rā user maū, &c., (ārnf m mennuf n) tef ḥor neb mesen sehā nef semf m ān n ba ār f da ānχ.*

Right side 1. *Ānχ ḥor qa next maū mrī . . sut χebt hq aut āb neb ār χet Rā user maū, &c., se rā, &c.*

Right side 2. *Ānχ sut χbt Rā user maū, &c. . . (ḥor) neb mesen sehā nef semf m ān ba āsθ gem n ḥn f met? r ḥbs m satu ḥnti rnpt āsaiu.* The meaning of the last phrase is not clear.

The monument was therefore a monolith figure of Horus as a hawk upon a pedestal, which Seti I. had intended to dedicate in the temple of Horus in memory of his father. Rameses II., like a dutiful son, completed the monument which was left unfinished at Seti's death, and joined in the dedication. A parallel to this on a large scale may be found in the temple of Qurnah, dedicated to Rameses I. by Seti I., who is accompanied by Rameses II.

The second monument was also of sandstone. The remains of it consist of two fragments from the upper part of the back, which fit together. They lie close together in the middle of the mound. The sides are straight, and are surmounted by a cornice, beneath which run three lines of inscription, terminating in the centre of the back. The top is flat and unpolished. Below the cornice the back measures 38 inches. Nearly 40 inches remain of the

length.¹ It perhaps served as the pedestal of a colossal hawk, made in a separate block.

The front is completely destroyed. Perhaps it was ornamented with a scene of offering, or with the titles of Rameses. The side inscriptions end in the middle of the back.

First line; left: (*Ānχ* *hor qa next*) *maā mrī sut χbt Rā user maā*, &c., *da ānχ* *hor neb mesen mr da ānχ rā mā*.

Right: (*Ānχ*) *hor qa next maā mrī sut χbt Rā user maā*, &c., *da ānχ* (*hor*) *her āb χbt* ² *mr*, &c.

Second line; left: (*Nχbt uat' māḳ*) *qemṯ uāf set se rā Amen mrī*, &c., *rā mā hor nb sešu mr*, &c.

Right: (*Hor nub*) *us rnpt āa nχt se rā Rameses* (sic) *rā mā*, *hor them ā mr*, &c.

Third line; left: (*Ar nef m mennuf*) *n t f hor nb mesen seḫā nef semf m ān n bā ar n nef se rā Amen mr Rāmessu*.

Right: identical with the last.

The name of the place in which these monuments were set up was the temple of Horus Pa hor, and the god of the temple was Horus, lord of Mesen. The same form of Horus, the winged disk of the sun, was worshipped at Edfu under the name of Horbeḥud, and the inscriptions on the temple at Edfu relate the history of a war in which he drove out the enemies of his father Harmachis from Egypt. These rebels have the appearance in the sculptures of Asiatics. According to the legend, Horbeḥud and Harmachis, accompanied by other gods in the bark of Rā, attacked and defeated them four times in Upper Egypt. Driven thence the enemy fled eastward along the Pelusiac arm, and only stopped when they reached the heights afterwards called 'Tal. There the gods found them, and Horbeḥud, assuming the form

of a lion with the face of a man and with its claws like knives, *āf mā des*, pursued them as they fled into the desert, and slew many, and took numerous prisoners. After this victory commemorative titles were given to the god, and the place was named 'Tal and Khent ābt.³ The gods then re-embarked, and sailed in pursuit of part of the fugitives that had taken to the water. They sailed upon the water of Sqedi for several days, and then having reached Ethiopia, attacked and routed the last remnant of the enemy.

In this text the expression *āf mā des* evidently refers to the same thing as *m des ā* of the Qantarah inscription. The exact construction of both of these expressions is difficult to see. The general meaning is clear, and would suit a hawk as well as a lion. From the shape of the Ramesside pedestals it is clear that they cannot have supported lions. But this same god was a lion, *Ṭam m χent ābt*, the lion watching over Egypt, good guardian of the two lands, the protector of Egypt (Naville, *Mythe d'Horus*, pl. ii.); the form is represented by the limestone lion that I found, and is perhaps referred to in the epithet *them ā* of the second pedestal, which seems to be contrasted with the epithet *neb mesen*. The former epithet is obscure, but might refer to the gathered up, sheathed claws of the victorious lion asleep, or resting, and watching at the gate of Egypt. Warlike kings are compared to this form of Horus.

102. This city of 'Tal, which Thothmes III. passed in his twenty-second year on his way to Syria, was capital of the fourteenth nome *Xent ābt* (beginning of the East). The determinative of its name, and the account mentioning a hill in the Edfu texts, suggest that it was in the desert on the edge of the Delta. The waters of Sqedi leading to Ethiopia would, moreover, suggest a communication with

¹ These 40 inches would be sufficient to complete the inscriptions on the sides, and therefore are the original measurement. No portion, however, of the front face remains.

² This title of Horus and the following one refer to his birthplace, Chemmis, near Buto, and the marshes in which he was hidden.

³ *Mesen* in this account is figured as a rectangular pedestal.

the Red Sea. All this points either to the region of Wadi Tumilât or to that about Pelusium as the situation of the nome. The former place is, however, excluded by the discovery that Pithom lay there, for neither space nor the order of the nomes will allow the fourteenth nome to be placed there as well.

But there are no such reasons against concluding that the fourteenth nome was in the district which I have been describing. Perhaps the canal (?) of Sqedî had been successfully cut through the rocks of El Gisir and to the Red Sea, or perhaps the gods sailed up the Pelusiatic branch, and then turned into the ancient canal cut by Sesostriis in the Wadi Tumilât.

But although we find a temple of the god of T'al at Tell abu Sêfe, we must not immediately conclude that we have found the city of T'al itself. The name Sile or Sella with which the mound is now satisfactorily identified might correspond to T'al. But if we turn to the nome lists of Ptolemy, we find that the nome occupying that part of the N.E. corner of Lower Egypt which lay outside the Pelusiatic branch was called the Sethroite, and the capital of the Sethroite nome was Heracleopolis. This city, as we have seen (p. 103, note 2), lay at or near Tell Belim, and cannot possibly have been Sile. And the name suggests the worship of a god victorious in many combats like Horus of Mesen, and very likely it is T'al itself, for there are ridges of sand leading up to Tel Belim in conformity with the Edfou account.

T'al, determined with the sign of the desert or hill country, was also the ancient name of the half-desert district afterwards included in the Sethroite nome. In it was a fortress, *Paxetm n T'al* or *Paxetm u nti m T'al*, "the fort of T'al" or "which is in T'al," frequently mentioned in the inscriptions and papyri of the nineteenth dynasty, and the history of this fort agrees exactly with the remains at Tel abu Sêfe. It is first mentioned in a campaign of the first year of Seti I. against the Shasu, in which he

drove them out of a number of fortresses, extending from this frontier fortress of Egypt to the fort of Kanana. It is clear from the context that the fort existed before that time. It is also mentioned in inscriptions and papyri of the time of Rameses II. and Merenptah, but certainly not after the nineteenth dynasty.

The sculptures at Karnak representing the triumphal return of Seti show *Paxetm n T'al* as a large fort built on both sides of a fresh-water canal, *Ta denat*, filled with crocodiles and running northwards into a lake or sea filled with fish (Menzaleh?). There is a bridge across the canal, the larger part of the fort lying at the W. end of the bridge. The canal was cut perhaps between Lakes Balah and Menzaleh, and the fort guarded the point where the Syrian road crossed the canal and the frontier. The importance of the place, as lying on the isthmus between the lakes, and on the shortest route from Syria, must have engaged the attention of the monarchs of the twelfth dynasty, who left so many monuments in the east of the Delta. But nothing now can be traced of their work or of that of succeeding dynasties down to the Ptolemies, with the exception of the stone monuments of the magnificent Pharaohs, Seti I. and Rameses II., who founded and adorned a chapel to the herogod of Mesen. Under Merenptah it was a station on the road from one part of his dominions to another. For a long period after the nineteenth dynasty it must have lain in ruins. The twenty-sixth dynasty no doubt learned a lesson from the Assyrian invasion, but with the growing importance of the naval powers of the Mediterranean and of intercourse with other countries by sea, it became of more importance to the kings of this and following dynasties to defend the sea coast and river mouth even than the land route.

Thus, instead of finding extensive works of this period at Tel abu Sêfe, we must look to Pelusium as the strongly fortified "key of

Egypt," and instead of the little fort at the "bridges," we find a great camp established at Defeneh, from which all points that needed defence could be easily reinforced, while provisions could be obtained in sufficient abundance.

When under the Ptolemies the place began again to be inhabited, the ancient walls had probably entirely disappeared, or if any foundations remained they were cleared out for new buildings. The settlement with its garrison flourished through the Roman period, but there is no trace of Arab occupation. If any Arab bricks have existed there, they have been carried off to Qantarrah.

With regard to the extent of the nome of Khent ábt, we have two points to help us in fixing it. The Sethroite nome under the Roman Empire lay on the E. of the Pelusiac branch. The south-western end of Khent ábt lay perhaps between Defeneh and Menâgi; at the latter place the Pelusiac arm touched the edge of the desert, and the nome goddess Uat of the nineteenth nome appears.

103. In connection with this nome, however, I must discuss one other place, and that is Defeneh, and the inscription which Mr. Petrie found there.

The sandstone monument upon which the inscription is cut has been a large stela. The upper part is entirely destroyed, and the rest, with the exception of the last six lines, is much mutilated. The date and king's name, with which it undoubtedly began, are therefore lost.

1. . . . his Majesty . . .
2. . . . which is in Sais of Neith . . .
3. . . . it was good. They said to his Majesty . . .
4.
5. . . . on this hill (Defench?). His Majesty said . . .
6. . . . soldiers? . . . cycle of years. He had not ascended . . .
7.

8. . . . rain of heaven . . . the 13th day
of Pharmouthi.

9. to the sovereign lord

10. according to the
measure of

11. . . . his Majesty. The heart of his Majesty was pleased with it more than anything. The soldiers began to adore his Majesty.

12. (saying) . . . thy spirits, O mighty king,
chief beloved of all the gods, a great marvel
took (?) place in thy reign.

13. such as had not been seen or heard of, the heavens rained upon the mount of Punt, rain being scanty in the fields of the south.

14 . . . in this month in which the rainfall took place at a time when rain was out of season even in the north land,

15. thy mother Neith of the temple of Sais
came to thee to conduct to thee the Nile giving
life to thy soldiers.

16. The king made a great sacrifice and a great offering to all the gods of this land, and performed (the service of) giving life stability, purity, and eternity.

17. His Majesty commanded to set up this tablet of white *bennu* stone in the temple of Khem, lord of . . . Coptos (?) of Khem (?) making it stand there for ever !

There can be little doubt that the name of Coptos has to be restored in the last line. The remains of the name show the legs and tail of a hawk-like bird, therefore probably *ti* of *Qebti*. The date of the stela is given roughly by the prominent introduction of Sais and Neith. It must belong to the period of the twenty-sixth dynasty. The inscription is so fragmentary that but little can be certainly made out of its purport. No distinct reason appears for its being found at Defeneh. The last lines mention an extraordinary fall of rain in the Red Sea district, the land of Punt. Perhaps it was in commemoration of this that a copy of the stela,

if not this stela itself, was set up at the representative city of Coptos, which lay at the entrance of the road to Punt. The fifteenth line *may* refer to the opening of a canal at Defeneh. Perhaps the completion and formal "opening" of the palace and camp there was the event chiefly intended to be recorded, while the rainfall in the same month on the eastern mountains was taken as a sign of the favour of heaven upon the undertaking. On this view the stela would have been set up by Psammetichus I. This will agree with the trace which Mr. Petrie thinks he discovered of the name of Psemthek upon a fragment of the stela.

The name of Daphnæ may be compared to one that is found in connection with the nome of Ṭal.¹ In a geographical inscription at Philæ (cf. Ptolemaic block, Tanis II. pl. X.) Horus appears as the chief god of the fourteenth nome in a city called Bennut or Ta Bennut. This might well stand for Daphnæ. But Bennut seems to be the capital of the nome, and the same as Ṭal, which certainly was not the same as Daphnæ. In the

¹ The name Ṭal may be pronounced Zal.

present state of our knowledge it is perhaps impossible to settle absolutely the hieroglyphic equivalent of Defeneh, Daphnæ, Tahpanhes. There are already several plausible identifications. But I will offer a further suggestion. *Bennu*, "the phoenix," was the name of the *uu* of the fourteenth nome, and it is quite possible that there was a *Ta ha pa bennu* Daphnæ ("house of the phoenix") in the desert portion of the nome. To distinguish it from the *Ha bennu* of Heliopolis, it may sometimes have been called *Ta ha pa bennu her set*, "The house of the phoenix in the desert *Ta-hapanhes*."

The phoenix or bennu bird may possibly have some connection with the black ibises mentioned in Hdt. ii. 75, which met and destroyed the yearly flight of winged serpents in a narrow pass in the Arabian hills near Buto. This Buto cannot be the well-known city in the N.W. of the Delta, but must, if Herodotus's account have any truth in it, be the other seat of the goddess at Nebêsheh, which may therefore be called the Eastern Buto, in the absence of any other known classical name.

Since the above was printed I have received a notice of the Qantarah inscription by M. Mowat, inserted in the "Bulletin Epigraphique" (vol. vi. 1886, pp. 243—247).

The learned author restores the text from the inscription of "Hieraconpolis" (meaning that of Manfalût, see p. 98), and quotes a diploma of Domitian (C. I. L. iii. dipl. 14, p. 857), which shows that the ala 1 Thracum Mauretana (of Qantarah) was in the year 86 in Judæa, together with the cohorts 1 Aug. Præt. Lusit. of the Manfalût inscription. This proves satisfactorily that MAVRETANA there written out in full is to be restored in the Qantarah inscription. M. Mowat's interpretation of the name of the ala differs slightly from that given in Marquardt and Mommsen, whose view of the meaning of such titles I had followed.

He draws the following conclusions with regard to the history of the ala :

It was originally *formed in* Mauretania of auxiliaries recruited in Thrace: thus at first it belonged to the army of Africa.

It was then detached and despatched to Judæa to co-operate in the repression of the revolt of the Jews in the year 70.

Later it is found in garrison at Alexandria, under Septimius Severus. This authoritative interpretation of the inscription mentioned in the note ¹ on p. 98 must, I suppose, be accepted as the true one.

Lastly, in A.D. 288, it was in garrison at Qantarah.

[As to the citizen Lusitanian cohort, this is found again at Hieraconpolis at the time of the compilation of the Notitia. Hieraconpolis was certainly not far from Dêr el Gebrâwi and Manfalût.]

F. LL. G.

Mr. B. V. Head has kindly examined the coins which I picked up at Tell abu Sêfe. They include a Ptolemaic coin, 146—122 B.C., another of Maximian, and two of the family of Constantine; with others of earlier Roman emperors not identifiable. An Arabic coin which was in the packet was, I believe, from one of the neighbouring sites. It seems probable that the military station was given up soon after the Notitia was compiled.

CONTENTS OF SOME PLATES.

PLATE VII.

1. Blue glazed pot.
2. Alabaster pot.
3. Bronze standard.
4. Bronze bell.
5. Pottery lamp.
6. Bronze bowl.
7. Bone figure.
8. Blue glazed flask.
(All above from House 100, 230 B.C.).
9. Incised pottery.
10. Figure suckling apes.
11. Pottery sistrum-mould.
12. Figure holding breasts.
13. Incised pottery.
- 14, 15. Iron pruning hooks.
16. Small flask, pottery.
- 17, 19. Pottery heads of animals.
18. Disc of blue or of white paste.
20. Unusual pottery figure.
21. Piece of trachyte corn rubber.
22. Dark brown hard pottery bowl.
23. Figure with vase at side.

PLATE VIII.

1. Glass necklace of fourth century A.D.
2. Blue glazed plaque with deities.
3. Aegis of Bast, yellow on blue glaze.
4. Silver ring with Horus of Am.
5. Silver ring with gold foil bezel.
6. Lotus in blue paste, hard.
7. Amulet of green glaze; *Kalantika*?
8. Gold pendant.
9. Man bearing a lamb, green glaze.

- 10—15. Gold foil amulets from one tomb.
- 18, 19. Gold earring and scarab from tomb 26.
- 20—28. Amulets, bead, and scarabs found together.
- 29—83. Various scarabs.

PLATE XX.

1. One of the bronze sockets of the large shrine.
2. Lamp reflector.
3. Bronze Ptah.
- 3a. Hinges of shrine of Ptah.
- 3b. Capitals of shrine of Ptah.
4. Hind-quarters of animals from a stand; bronze.
(1 to 4 from Gemayemi.)
5. Bronze pail and cover, twenty-sixth dynasty.
Tomb 16.

PLATE XXIV.

1. Limestone horseman.
2. Pottery figure.
3. Limestone figure.
4. Pottery figure.
5. Whetstone with characters.
6. Piece of early pottery.
- 7, 8. Heads of warriors in red pottery.
- 9—13. Pottery found in plain east of Kasr.

PLATE XXXVI.

1. Seal of Psamtik I.
2. Seals of Nekau.
3. Seal of Psamtik II.
4. Seals of inspectors, on inner side.
5. Seals of Aahmes.

PLATE XXXVII.

- 1, 2. Horses' bits.
3. Trident.
4. Lance-head.
- 5, 5a, 6. Pieces of horses' bits.
7. Sword.
- 8—11. Helmet peaks?
- 12—16. Arrow-heads.
17. Large knife.
18. Swivel ring.
- 19, 19a, 19b. Scale armour.
20. Large knife.

PLATE XXXVIII.

1. Pickaxe.
2. Chisel.
3. Socket of chisel.
4. Auger?
5. Bident.
6. Large knife, chamber 19 A.
7. Sail needle? or netting needle.
8. Razor.
- 9, 10. Cones of sheet iron, punched; rasps.
11. Chisel.
12. Poker.
13. Spring?
14. Fish-hook.
- 15—20. Chisels.
21. Plough-iron.
22. Chisel.
23. Knife.
24. Axe.

PLATE XLI.

(Objects from Defenneh and neighbouring tells, unless specified.)

1. Small gold finger ring.
2. Gold earring, hollow.
- 3—7. Gold earrings, solid.
8. Silver amulet case or shrine, with sliding lid partly drawn up and pressed in, as when found. *Defenneh*.

9. Gold statuette found in the shrine No. 8.
10. Gold handle of a tray, the long ends having been bent at right angles beneath the tray: the whole is cast, excepting the ribs of the petals for holding the inlay, which are strips soldered on. Found, evidently looted, along with lumps of silver, in the camp on the east of the Kasr. *Defenneh*.
11. Silver ram's head, probably from a statuette of Khnum. Camp, *Defenneh*.
12. Gold earring, open work of soldered globules.
13. Part of gold earring, trihedral pyramid of soldered globules.
14. Gold bead of two pentagonal discs soldered together.
15. Gold foil, thick ribbed; from an earring?
16. Gold foil, floret.
17. Gold bead, soldered globules.
18. Piece of gold chain, a pendant; probably a glass bead lost from end.
- 19—23. Gold foil ornaments.
24. Piece of gold chain with a band round each link.
25. Piece of gold chain with pendant.
26. Gold symbolic eye; hollow, sheet, same both sides, ribs soldered on.
27. Gold pendant, hollow, flat back.
28. Gold wire, square, twisted.
29. Gold setting of a gem.
30. Gold symbolic eye.
31. Diopase in gold setting with row of globules.

-
32. Silver ring of a "priest of Amen, Hon-Ra-ab-nefer-neb-teshert" (or "the slave of Psamtik II., lord of the red crown").
 33. Silver bezel of ring of "Anch-hor-menkh-ab, first priest of Tum" (?).
 - 33a. Silver bezel of Teta-nub-hotep.
 34. Silver bezel of ring of a "servant of Neit; Psamtik-se-Neit."
 35. Silver bezel of ring of "servant of Neit, Har-em-heb."

36. Silver bezel of ring, engraved with winged scarabæus.
37. Silver ring with silver scarab.
-
38. Star of lapis-lazuli.
39. Lion-headed uræus of most delicate work. Lapis-lazuli.
40. Crystal of Iceland-spar (calcite), with cartouche of "Ket" and "nefrui" on reverse.
41. Part of bezel of violet glazed pottery.
-
42. Part of a scarab of dark green paste, imitating jasper.
- 43—54. Scarabs.
55. Scarab of Sheshonk IV.
56. Scarab of Psamtik I. or Haa-ab-ra. Dark green jasper.
57. Scarab of Ra-nefer-ankh, fourteenth dynasty? Obsidian.
58. Scarab of Ra-men; green jasper.
59. Scarab of Ra-ar; green pottery. Twenty-fourth or twenty-fifth dynasty?
60. Scarab of Psamtik; schist.
- 61—67. Scarabs.
- 68, 69. Scarabs of blue paste, probably made at Naukratis. 69 seems to have the winged sphinx walking, found on such scarabs.
70. Combination of Khnum, Ptah-sokar, and hawk. *Chamber 2 or 3, Kasr.*
- 71, 72. Eye plaque and Taurt. *Chamber 7, Kasr, Defenneh.*
73. Seal of green glazed ware. *Chamber 7, Kasr, Defenneh.*
74. Block for a seal, damaged in drilling. Pale green, translucent, calcite.
75. Block for a seal; white calcite.
76. Bronze seal of Aahmes. *Chamber 19A, Kasr, Defenneh.*
77. Amber-coloured glass, stamped with cupid on lion. Roman.
78. Baubo, clear light green glass. Roman.
79. Term, in clear dark blue glass. „
80. Head of Anubis, stamped on clear green glass. Roman.
81. Amber-coloured glass, stamped with cupid driving goat. Roman.

E R R A T A.

The arrival of the monuments from Nebesheli enables me to correct some errors.

Pl. x. 5*a*, 6: The sign šeps has disk and horns, and is apparently lion-headed.

Pl. x. 5*b*.  Naï.

Pl. x. 7. Cf. p. 30, col. 1, line 3. Mr. Petrie has pointed out to me that there is a bracelet on the arm of the statue: it must, therefore, be of a goddess.

Pl. xi. 16*a*. The  of  is joined to the tail of .

The name is .

Pl. xi. 16*d*. The figure on the right is certainly of a god. The erasure suggests Set. There seems to be a *child* behind him.

Pl. xii. 18. The figures of the genii should be represented walking.
F. LL. G.

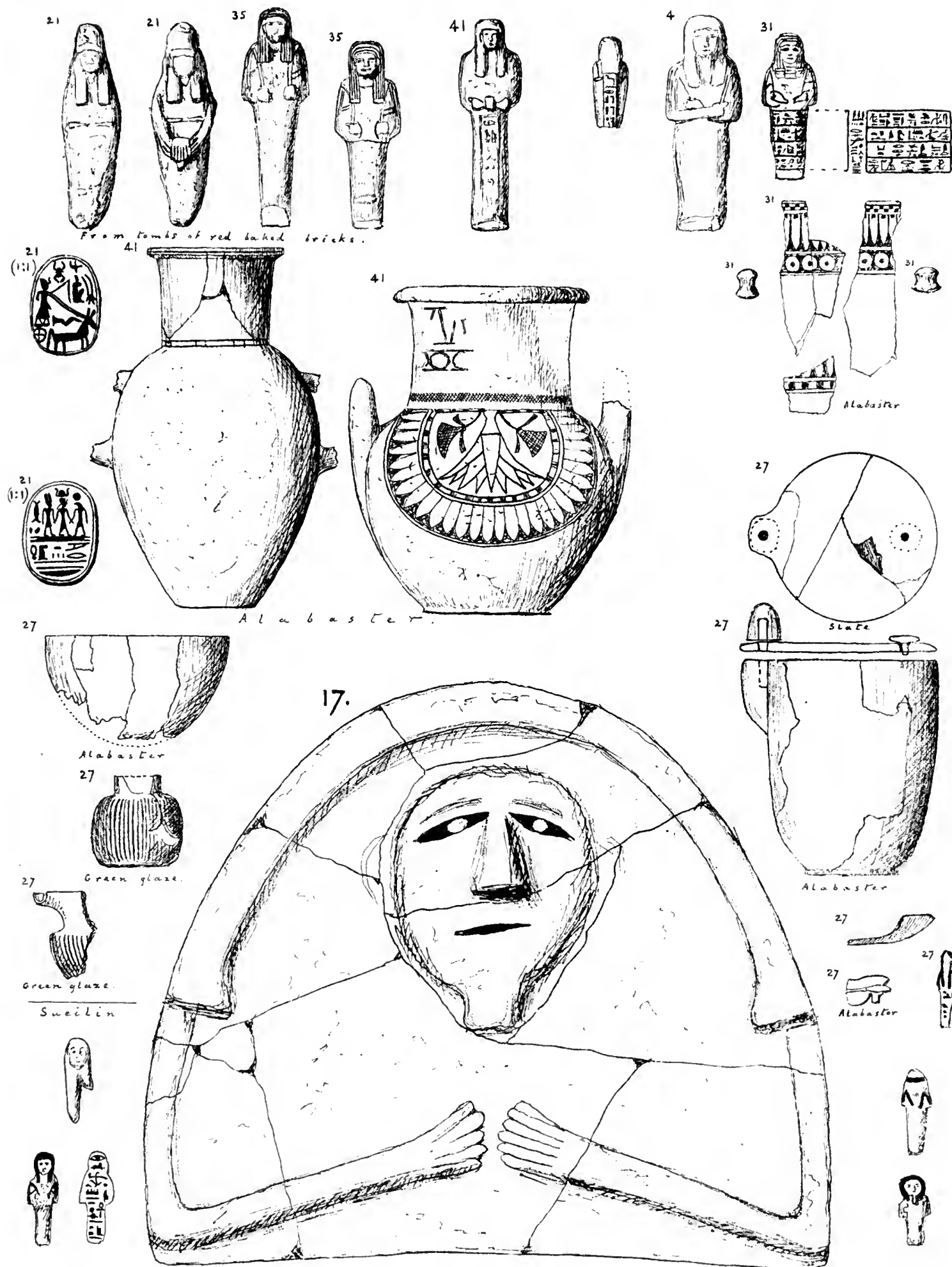
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near 18



24



17



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33



33



Pumice

33



Alabaster

33



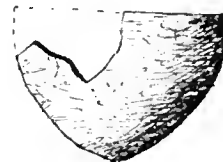
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Sandstone

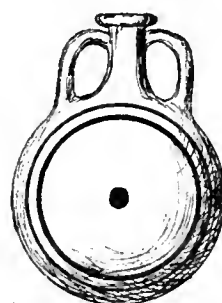
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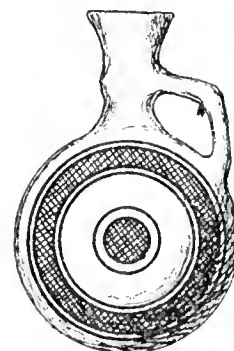
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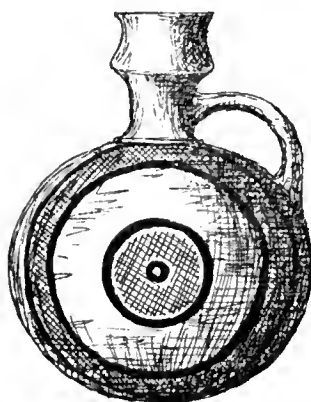
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without lines Tomb 26.



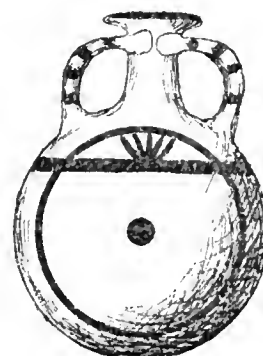
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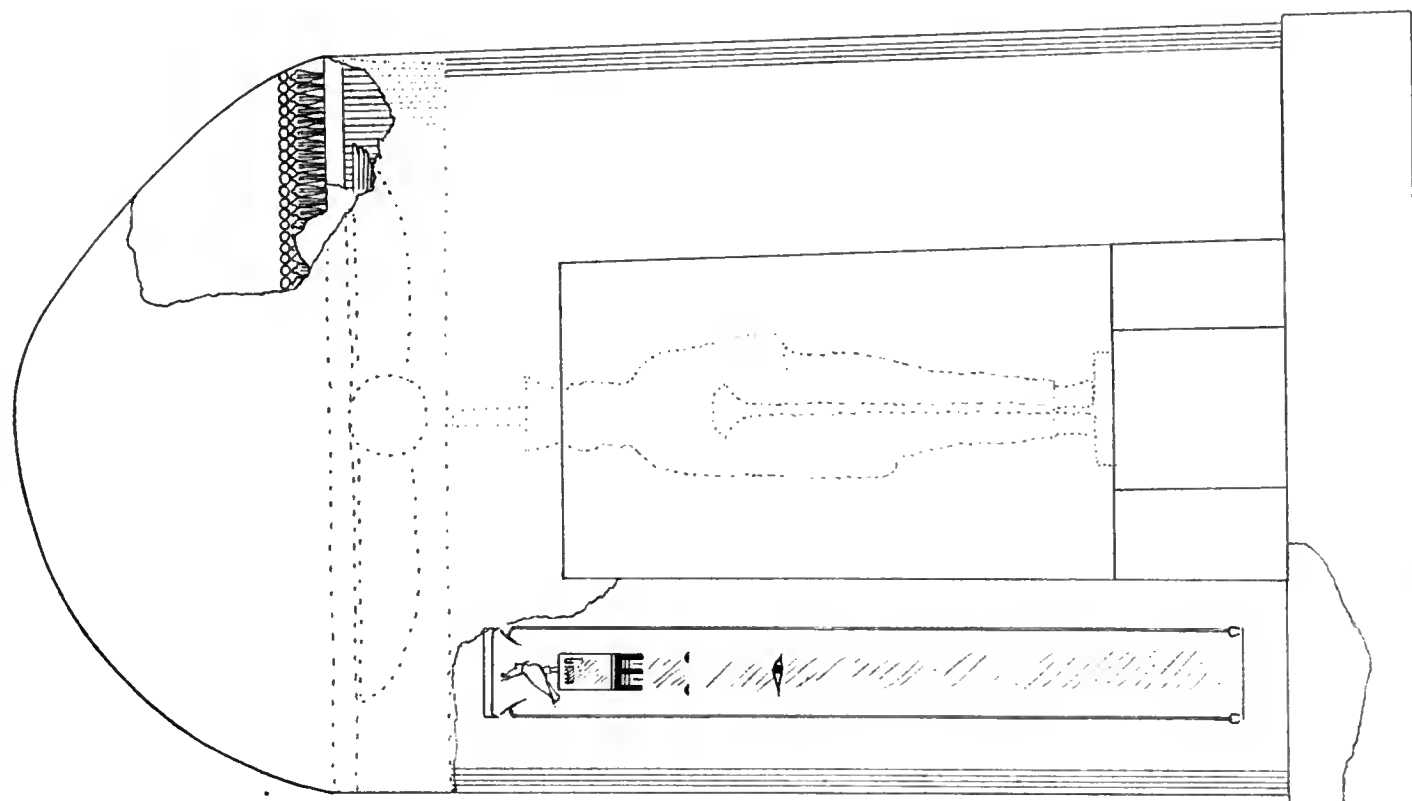


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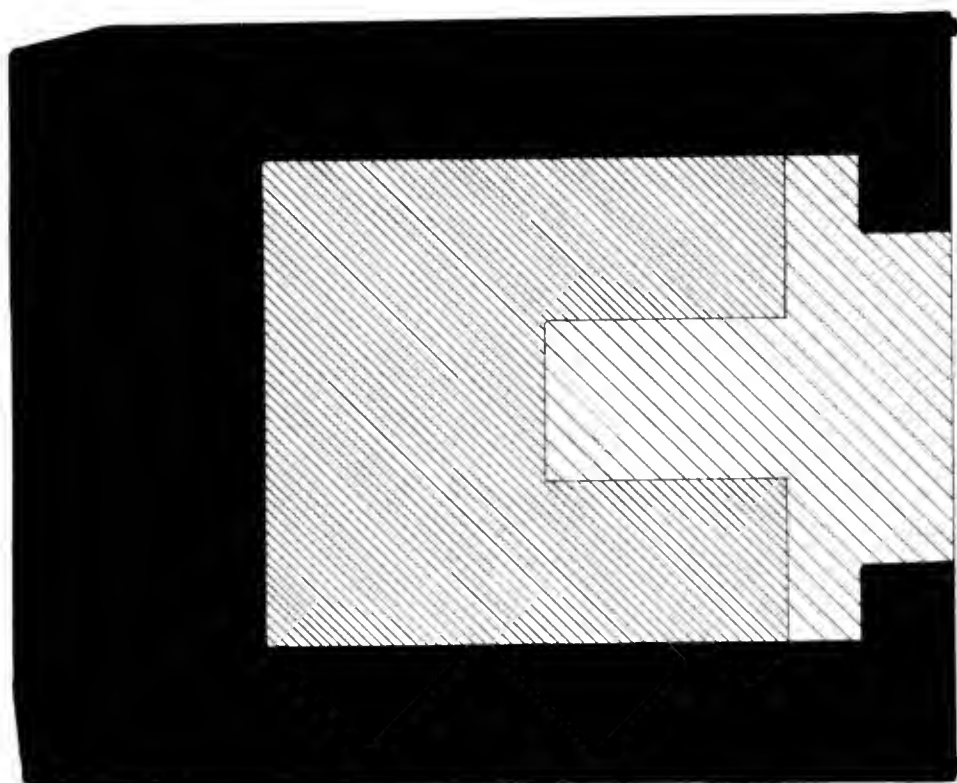
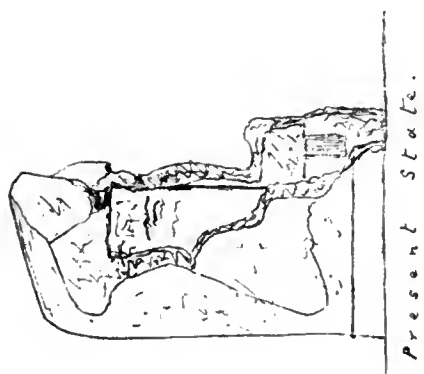


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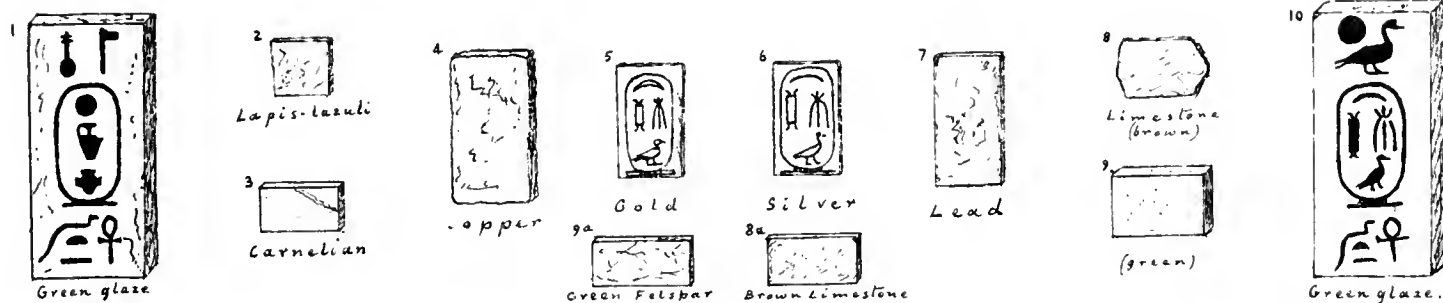
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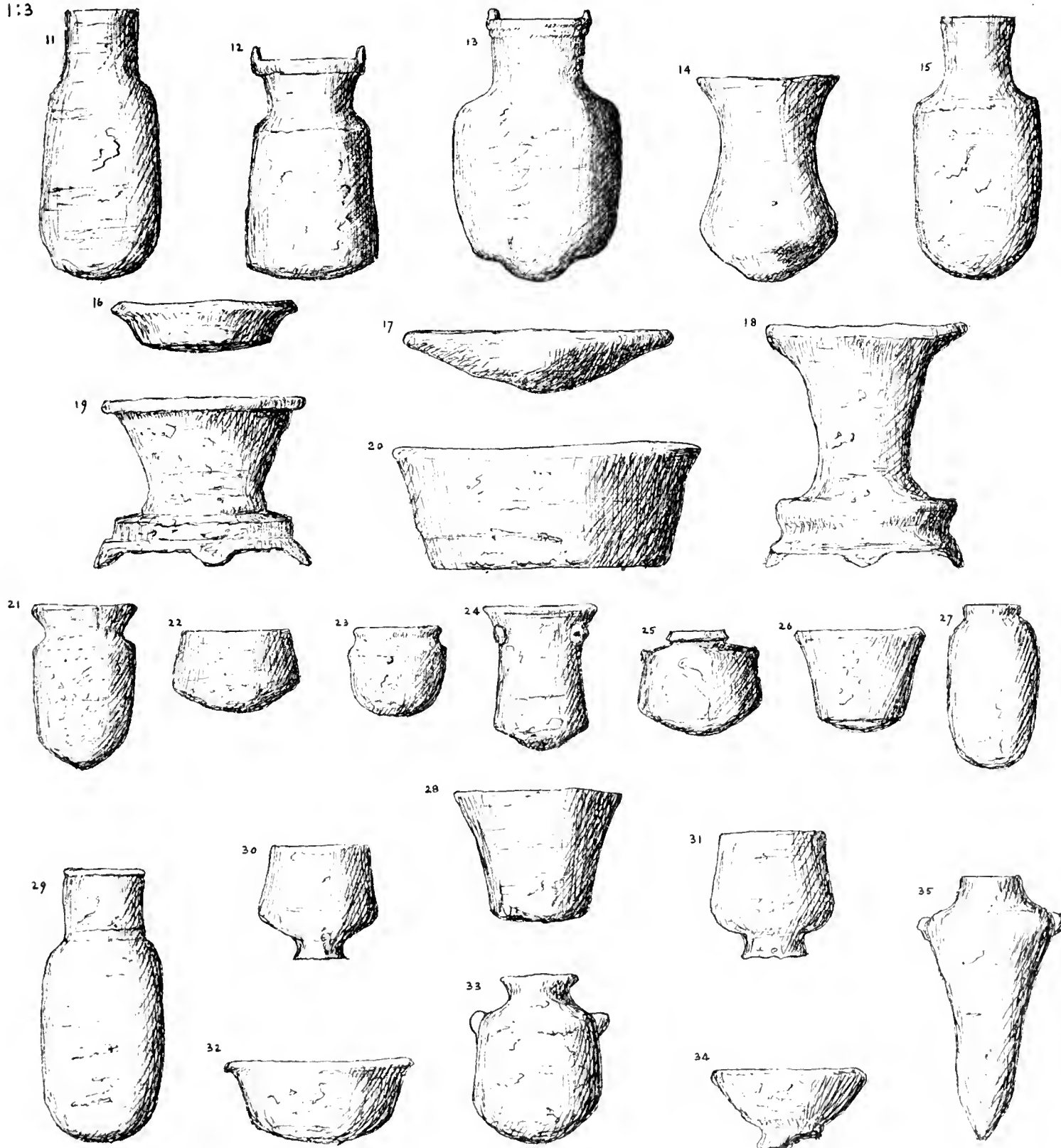
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inside

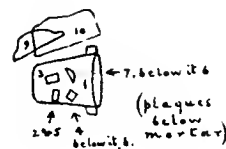


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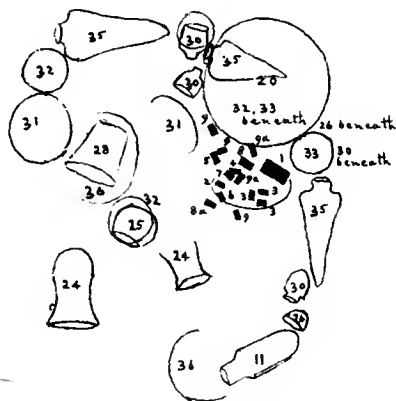


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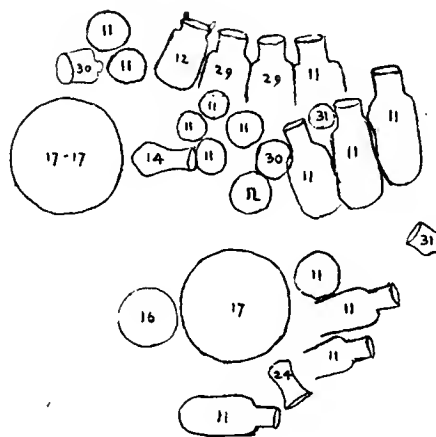
S.E. corner of
limestone building
in cemetery.

N.W. Deposit

plaques
beneath
pottery.



W. central Deposit



plaques beneath pottery
hidden by water

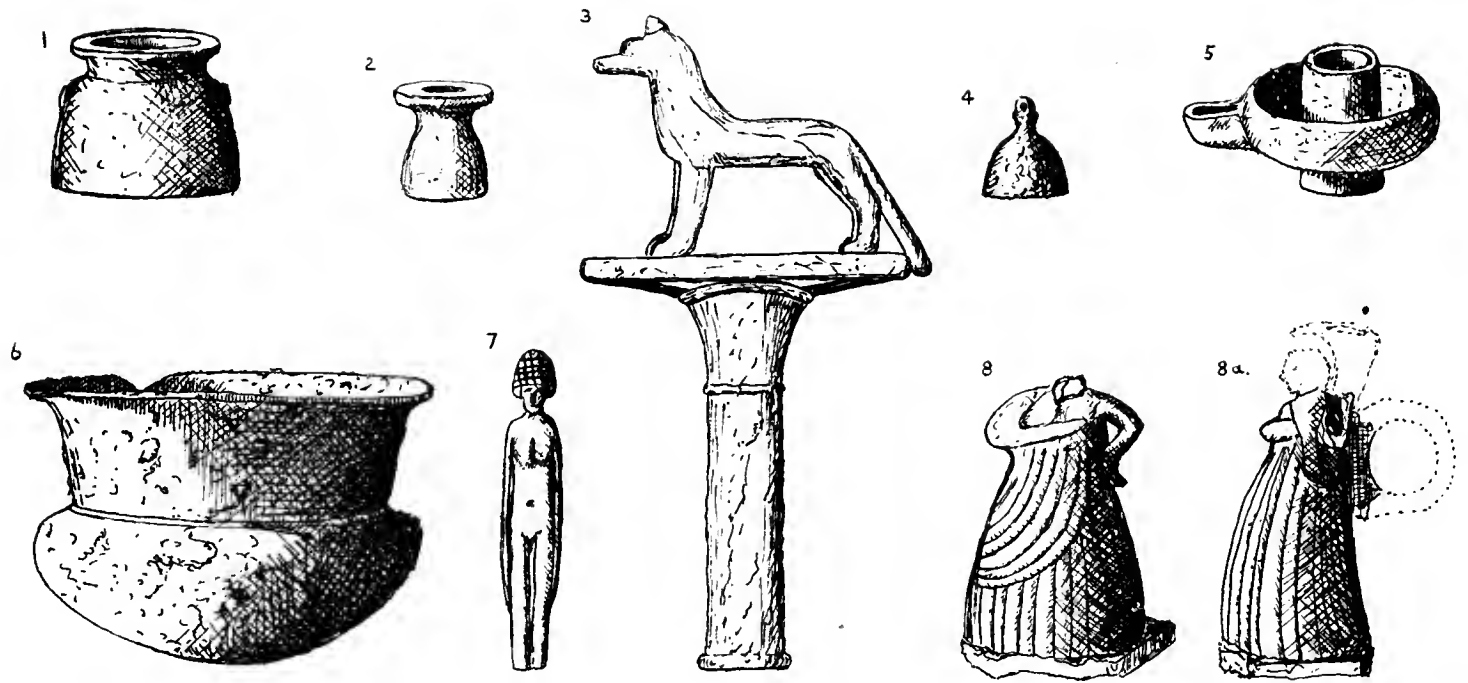


S.W. Deposit.

plaques
beneath
pottery.



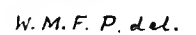
S.E. Deposit

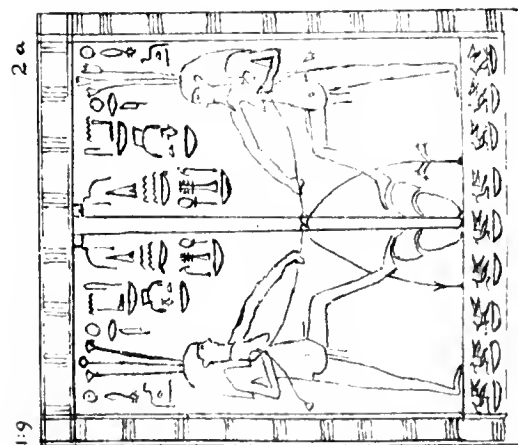
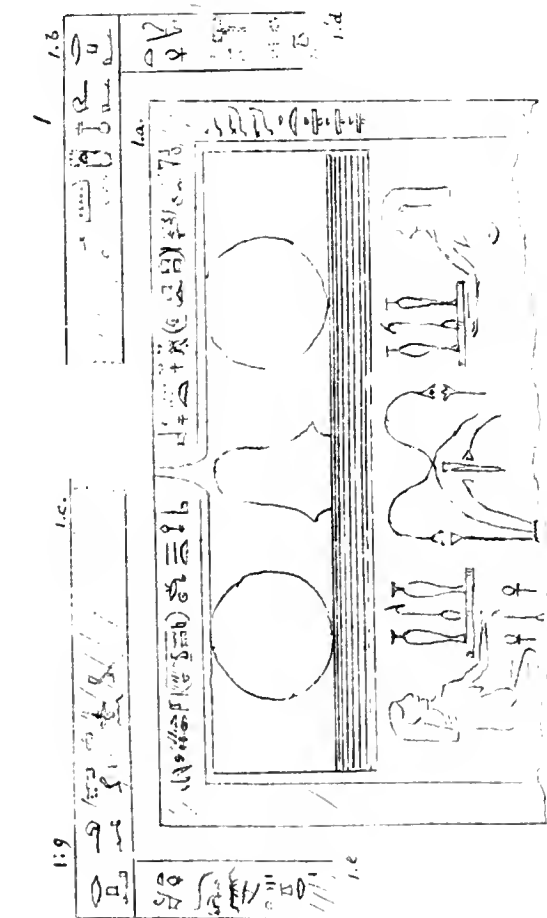
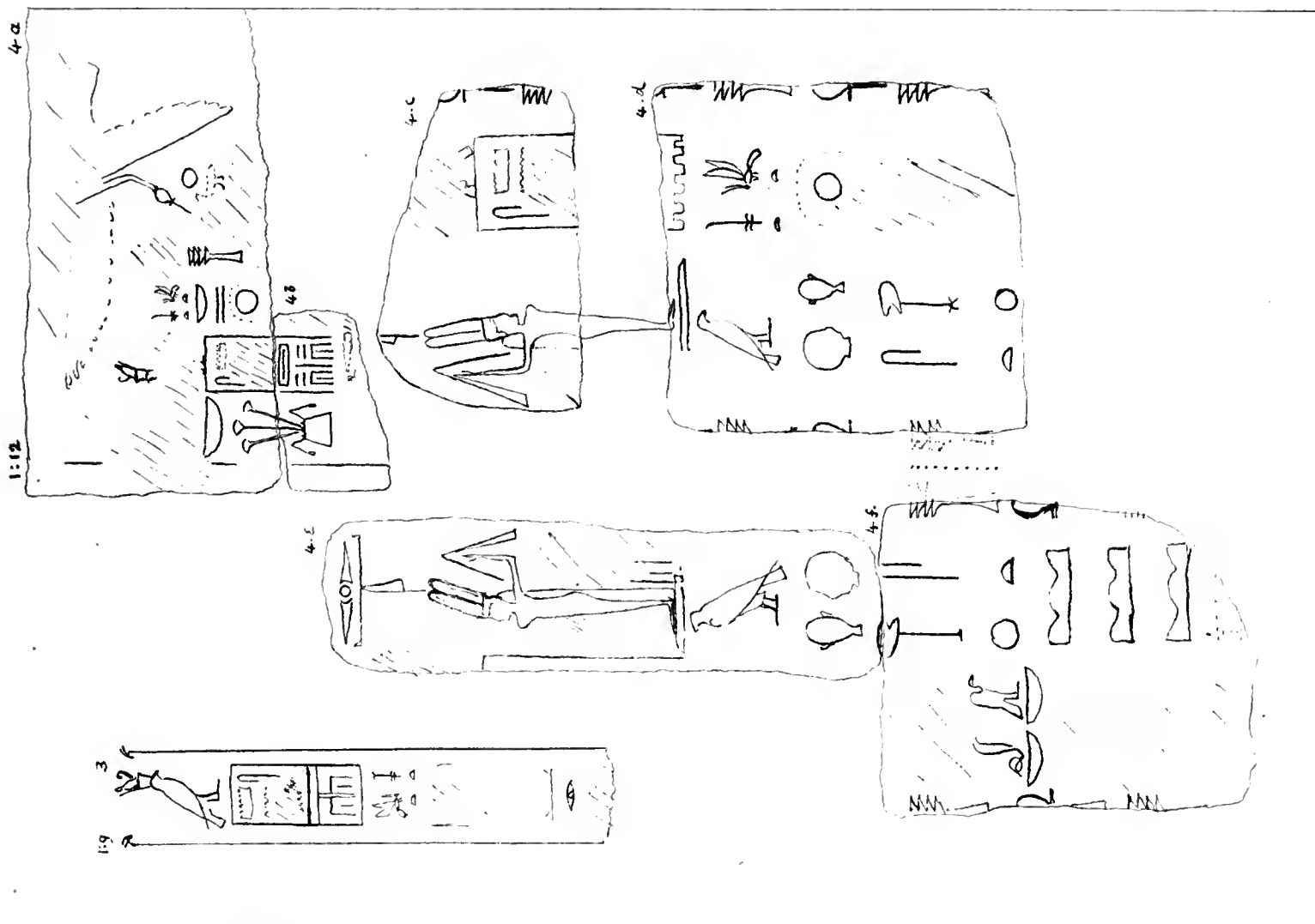


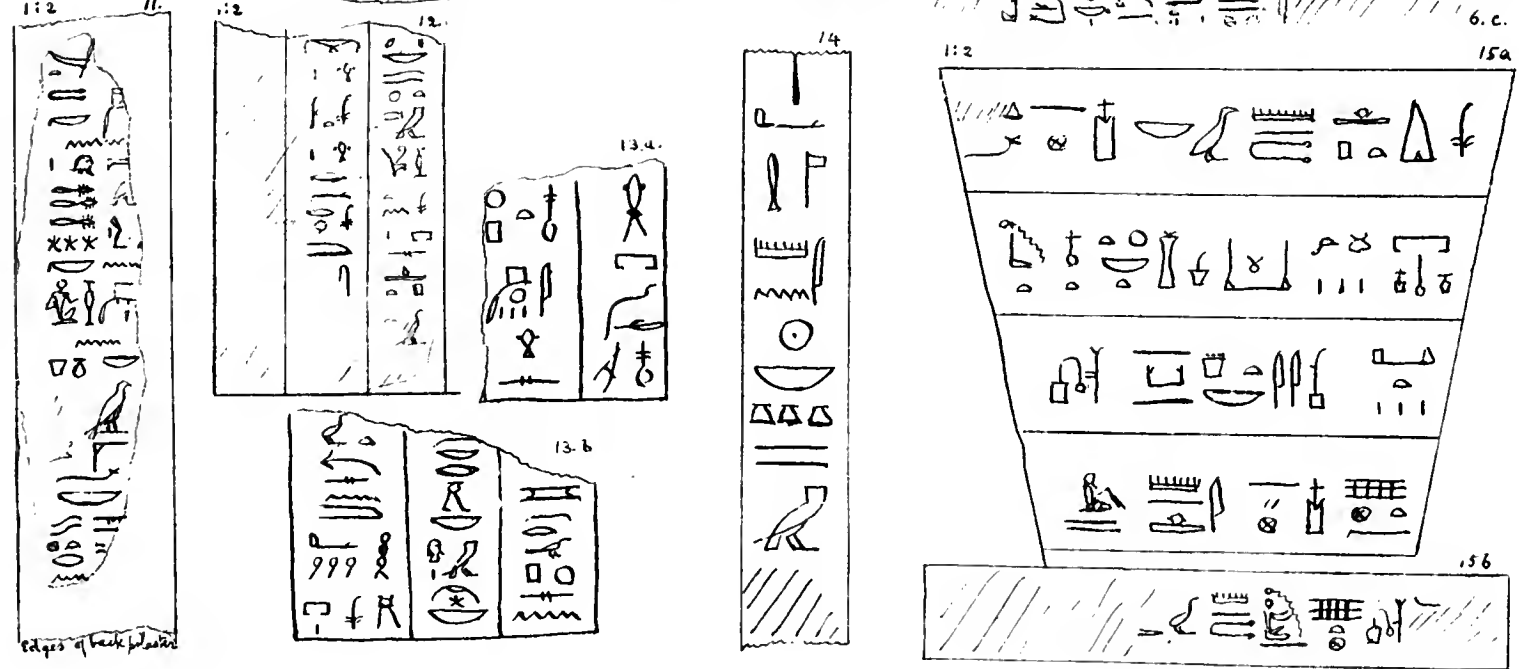
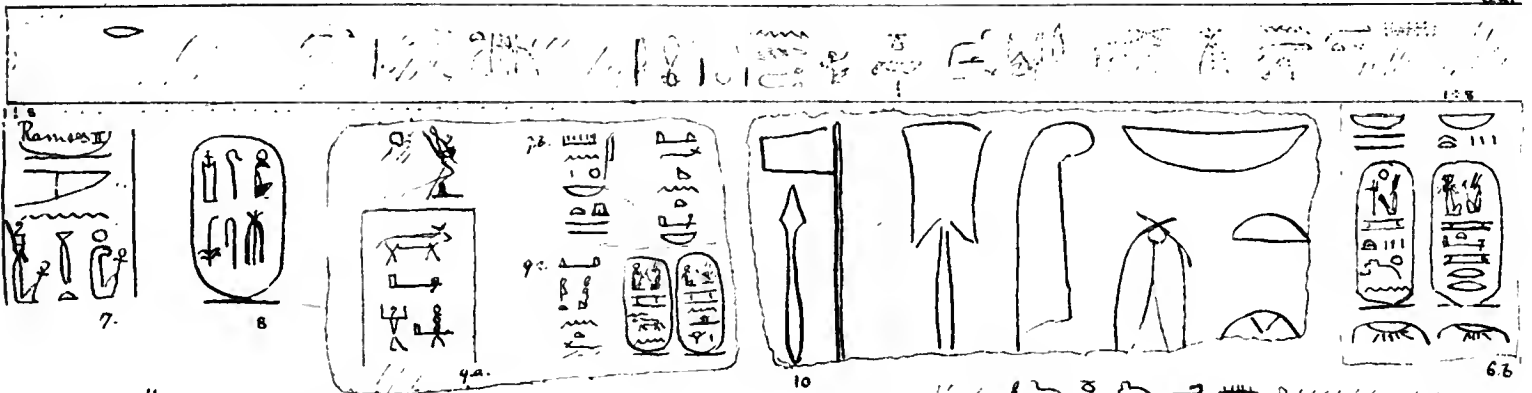
From house 100 in Temnos. About 230 B.C.



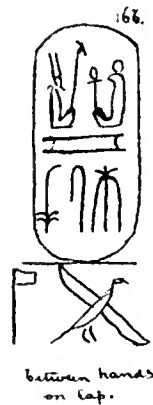
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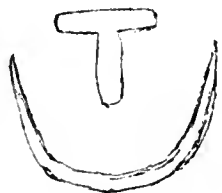




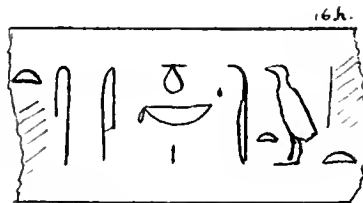
16.a.
Left arm
on lap
(reversed)



between hands
on lap.



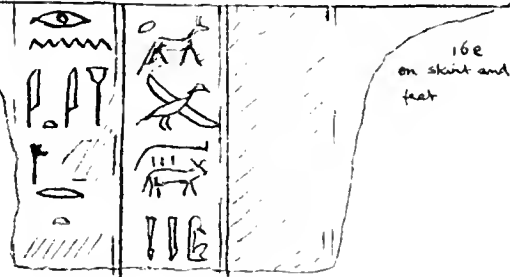
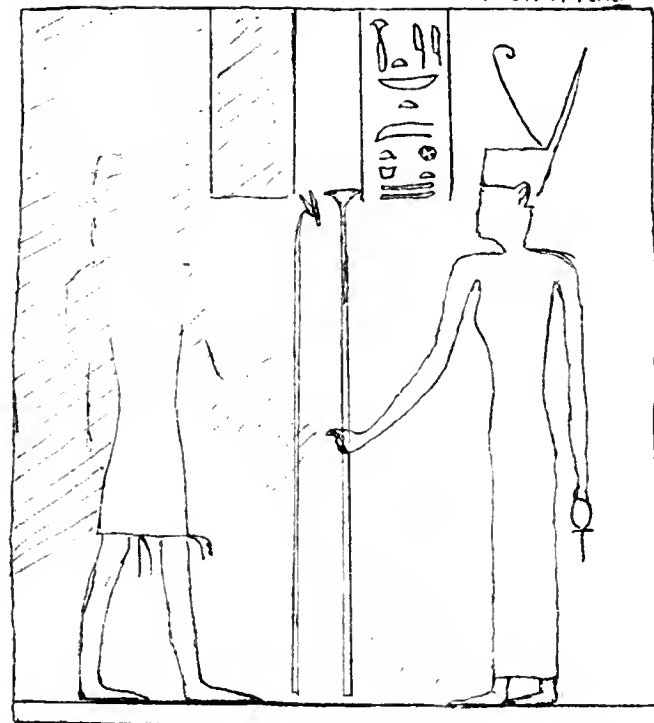
Mason's mark on
block of pavement
17.



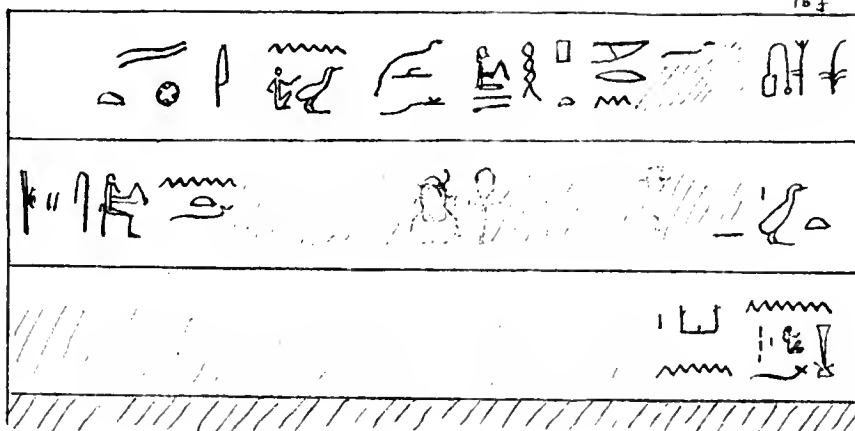
middle of front of base



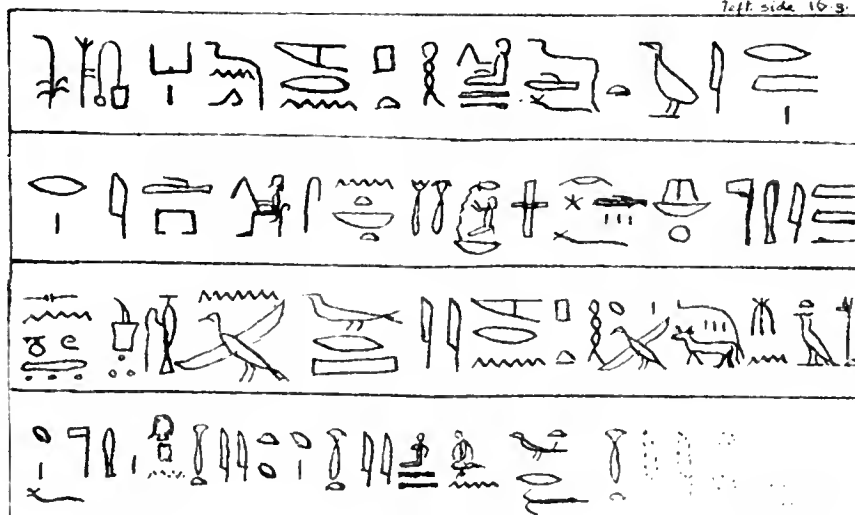
part of left side of base.



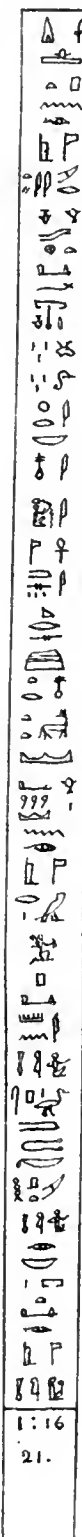
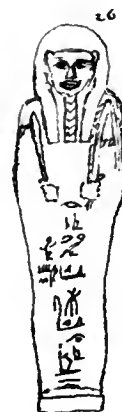
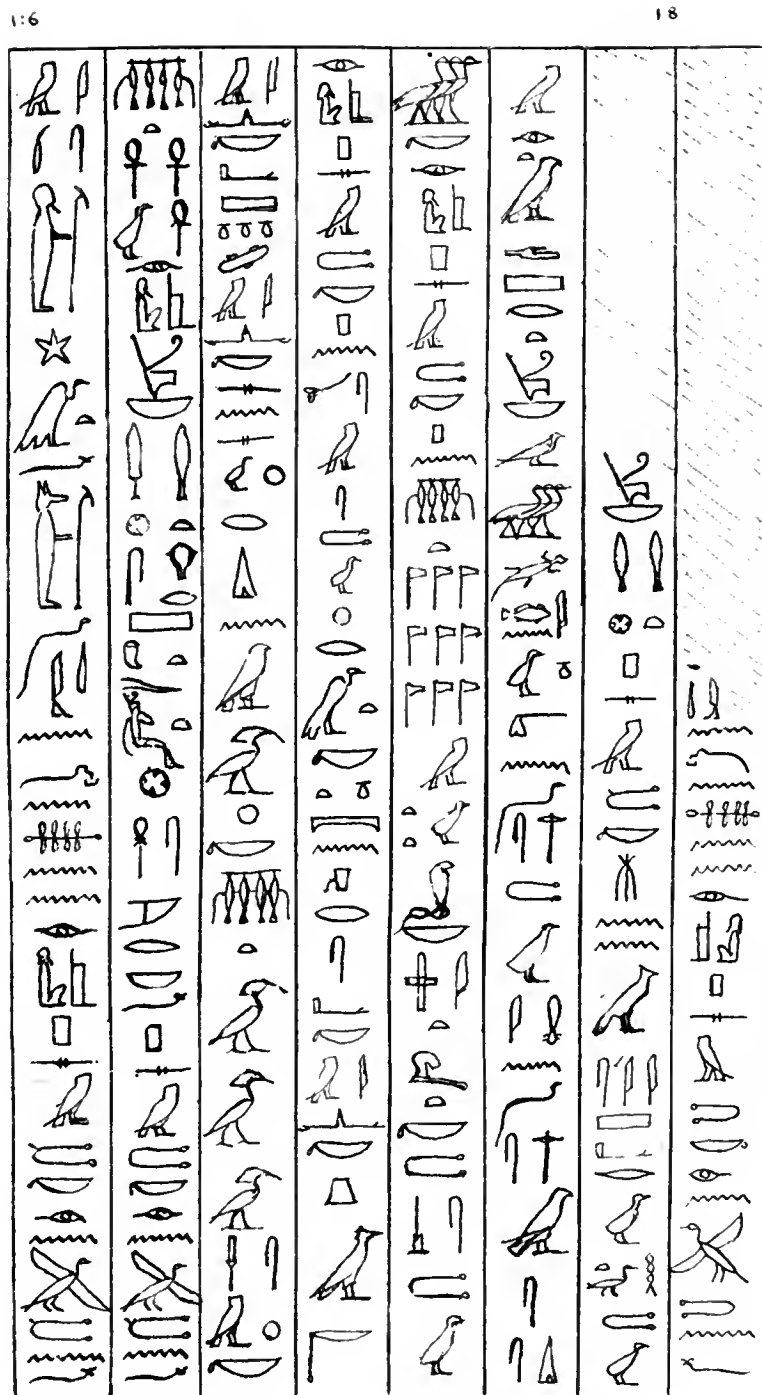
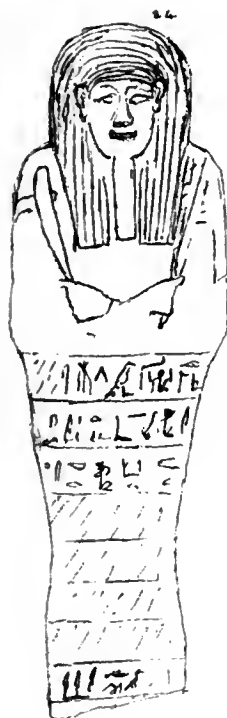
16.e
on skirt and
feet



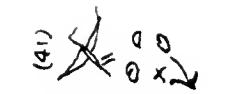
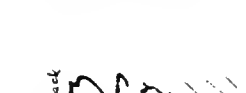
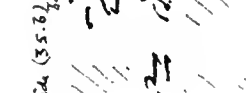
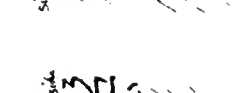





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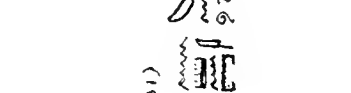



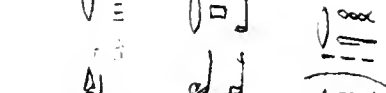
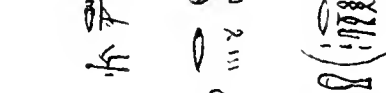
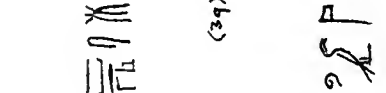

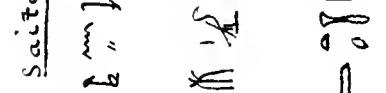
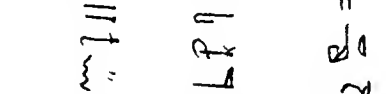
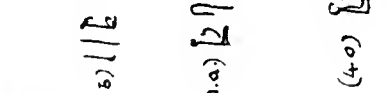
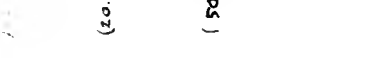
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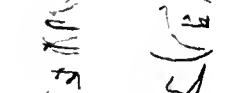
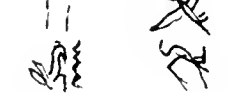
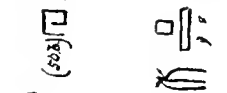
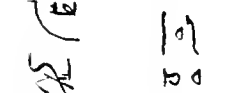






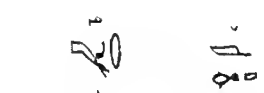

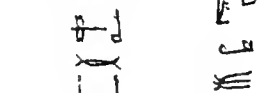
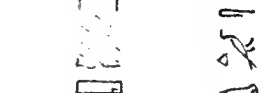
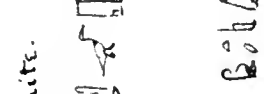
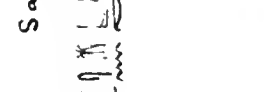



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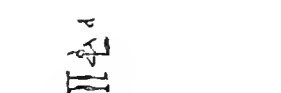
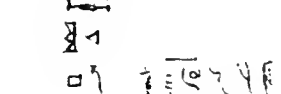
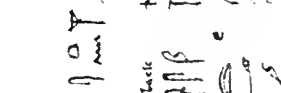
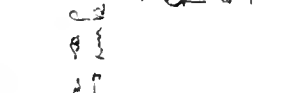
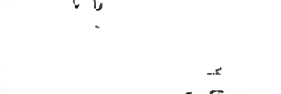
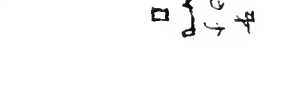



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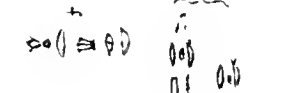
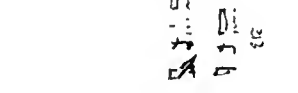

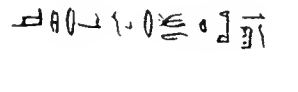

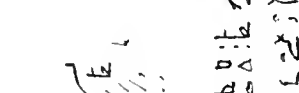

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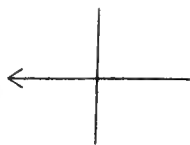
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TEMENOS AND TEMPLES TELL NEBESHEH.

SCALE 1:1000.

200 Feet

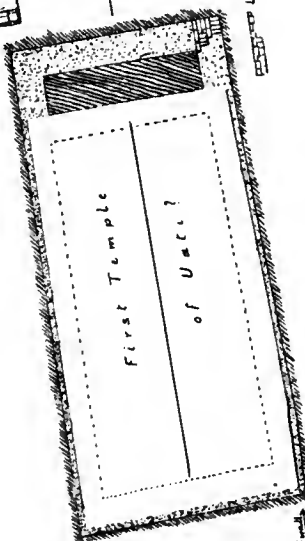


Granite Column
of Menesplad.



Foundation
Proposed

Axis



Axis

Remains of foundation
after excavation
showing that
the temple was
situated on a
foundation

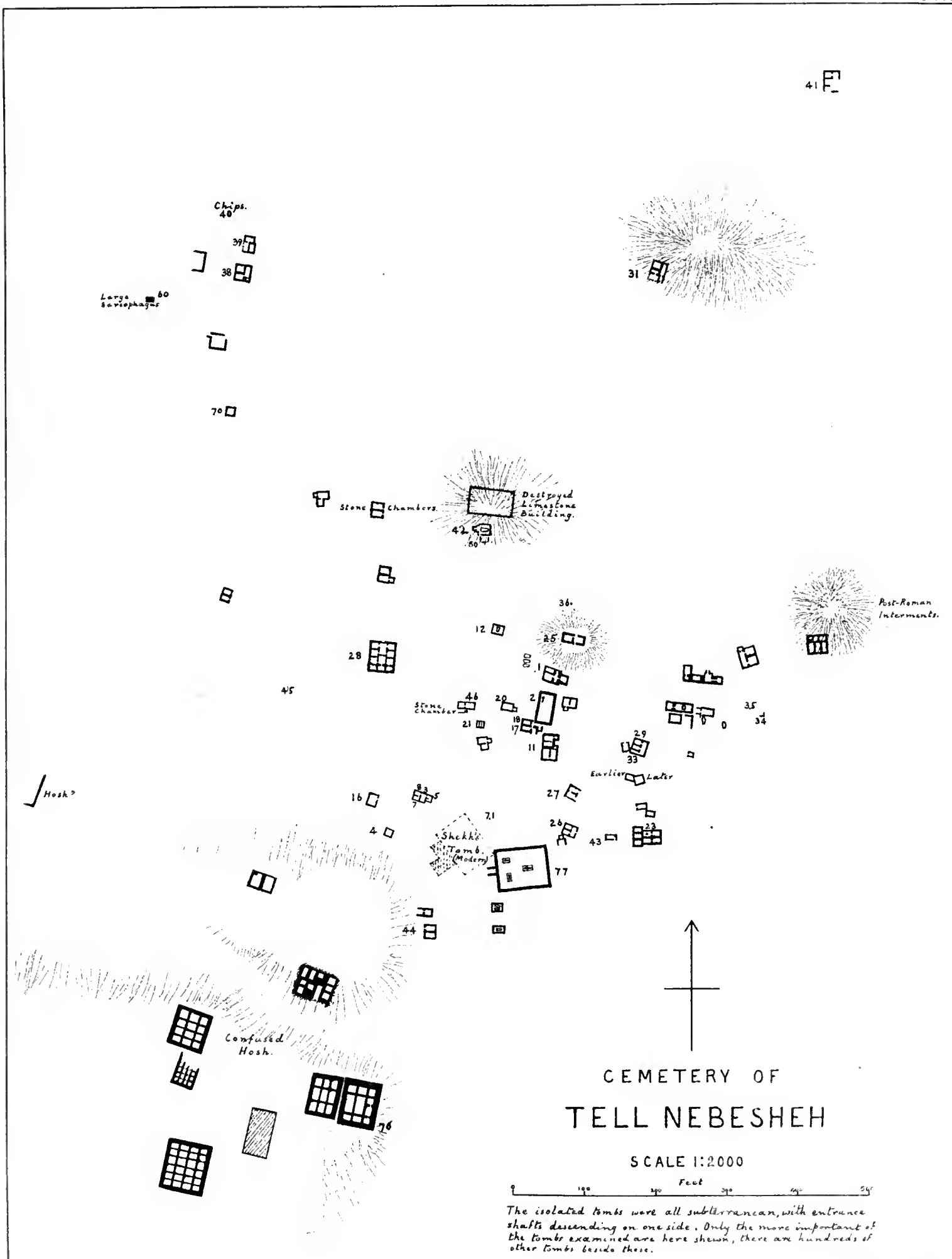
Thin late
foundation

Late foundation

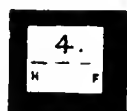
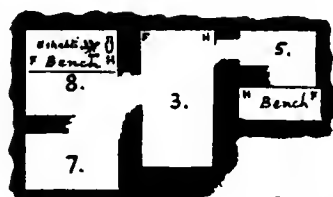
Mound of

Ptolemaic Houses.

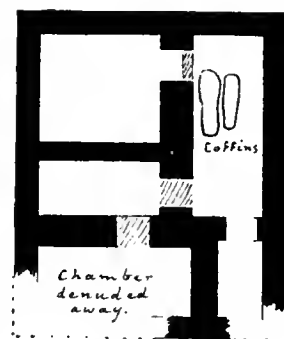
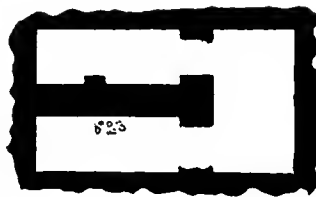
Line parallel to Axis.



Hr head. F=feet. S=ushebt. → Spear heads. ← Forks.



Bending
of bricks



Ha-ra Ra-mes-
-nekht.

Ramesside Tombs, XIX-XX Dyn.

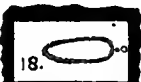
27.



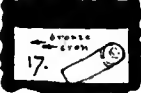
1.



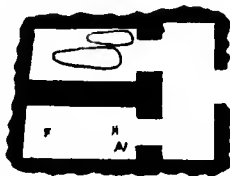
14.



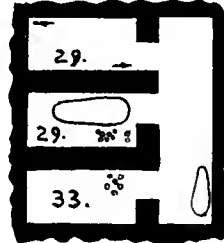
18.



17.



26.



29.

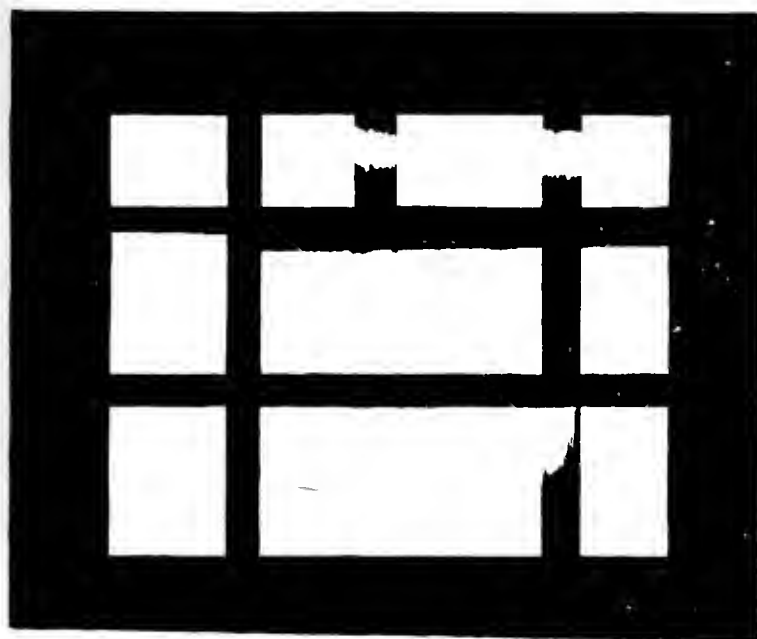
29.

33.

Nekht-amen.

31.

Cypriote Tombs XXV-XXVII Dyn.

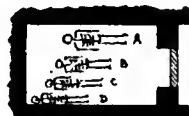


76.

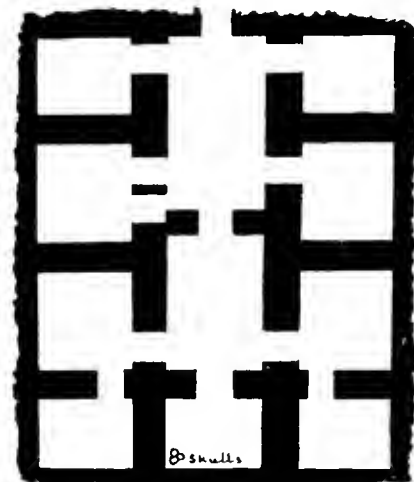


12.

Hor-em-hab.



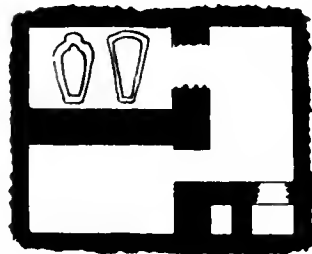
23.



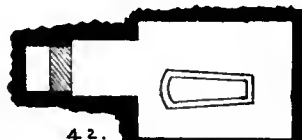
28.



20.



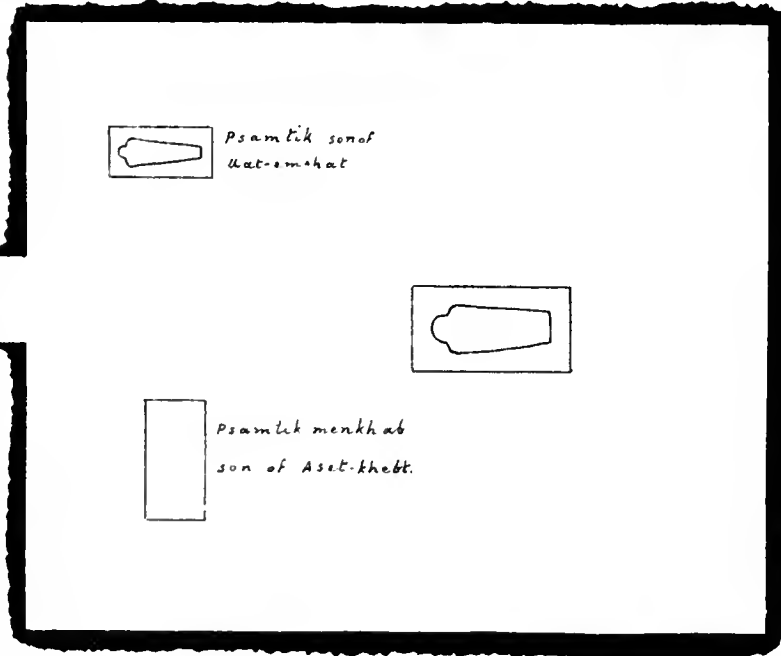
38.



42.

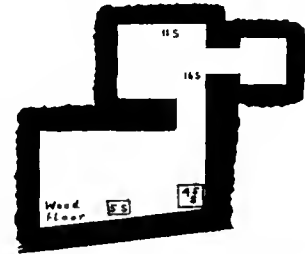
Petamen

Destroyed brick
tomb, S.O. on this side



77.

Saite Tombs, XXVI Dyn.



11.

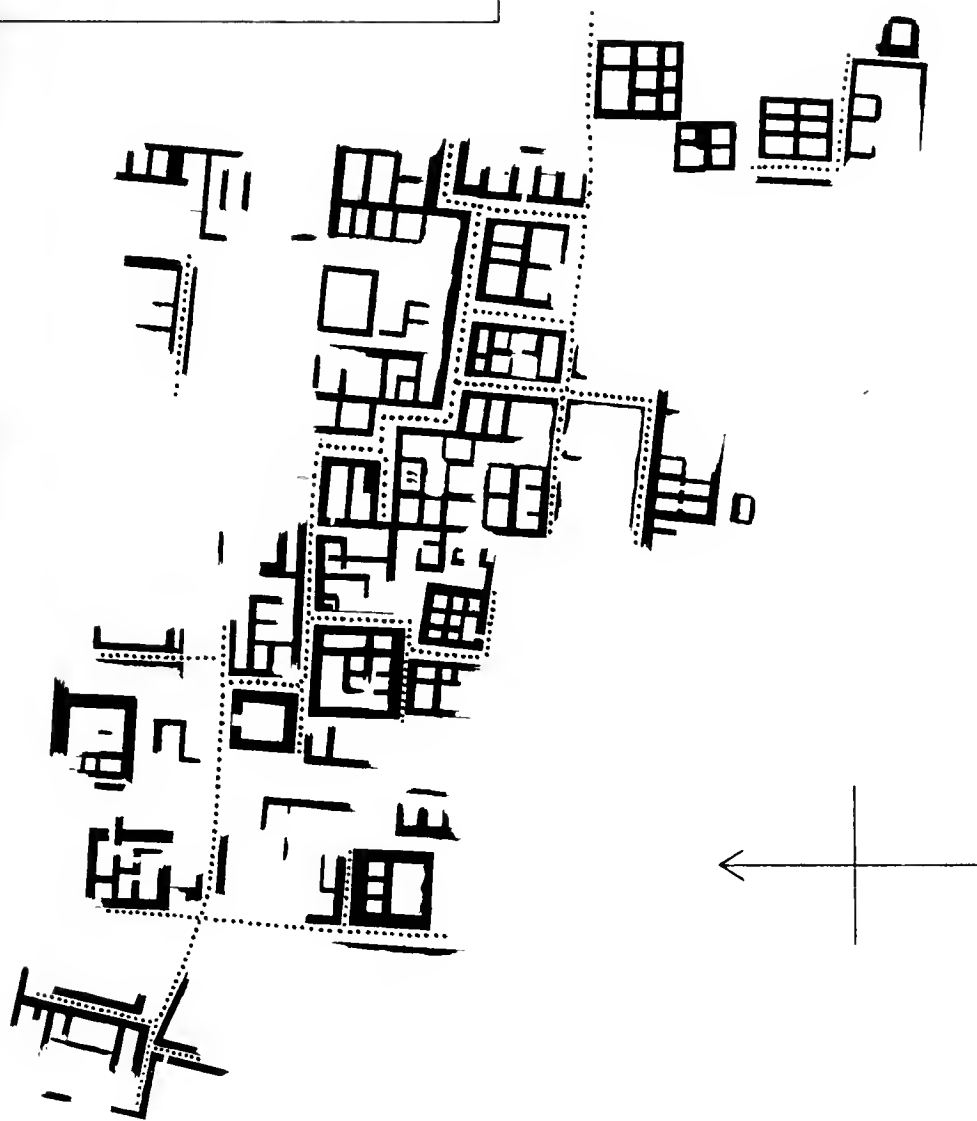
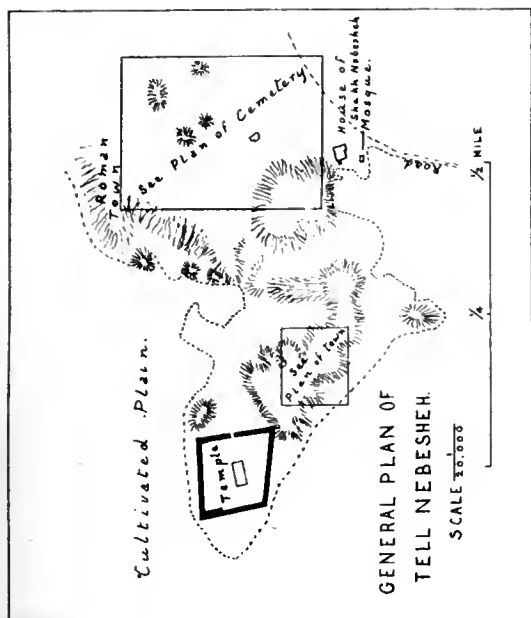


39.

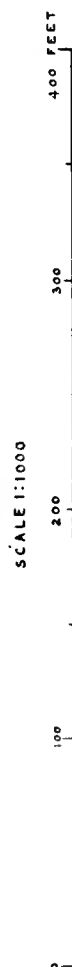


46

W.M.F.P. del.

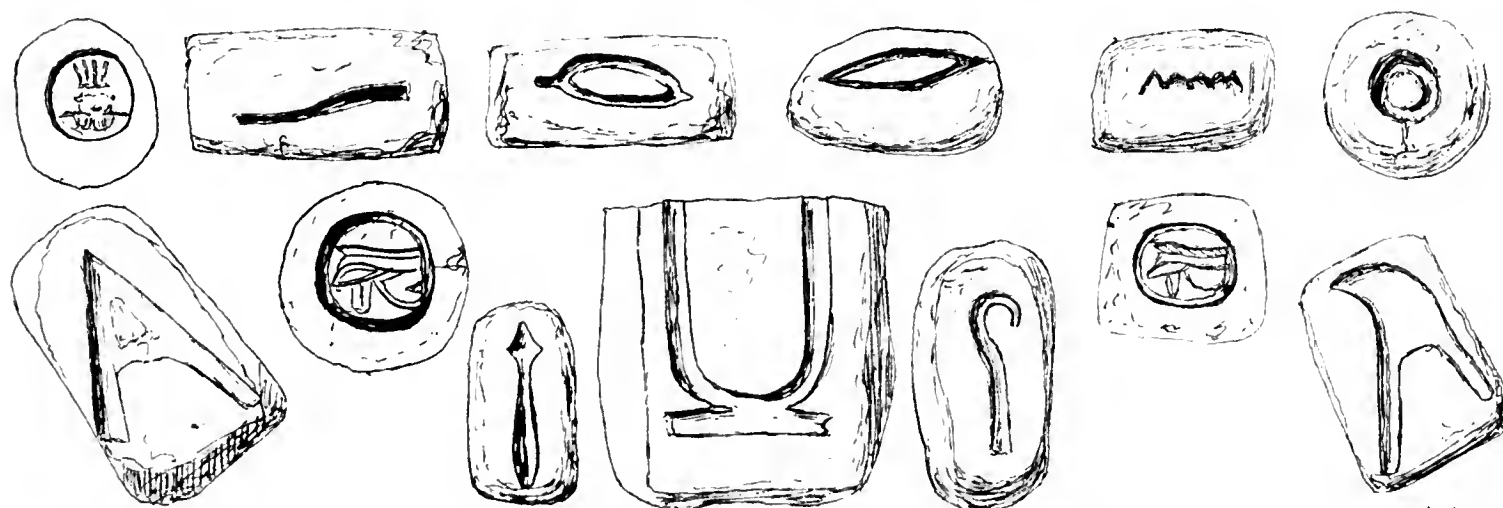
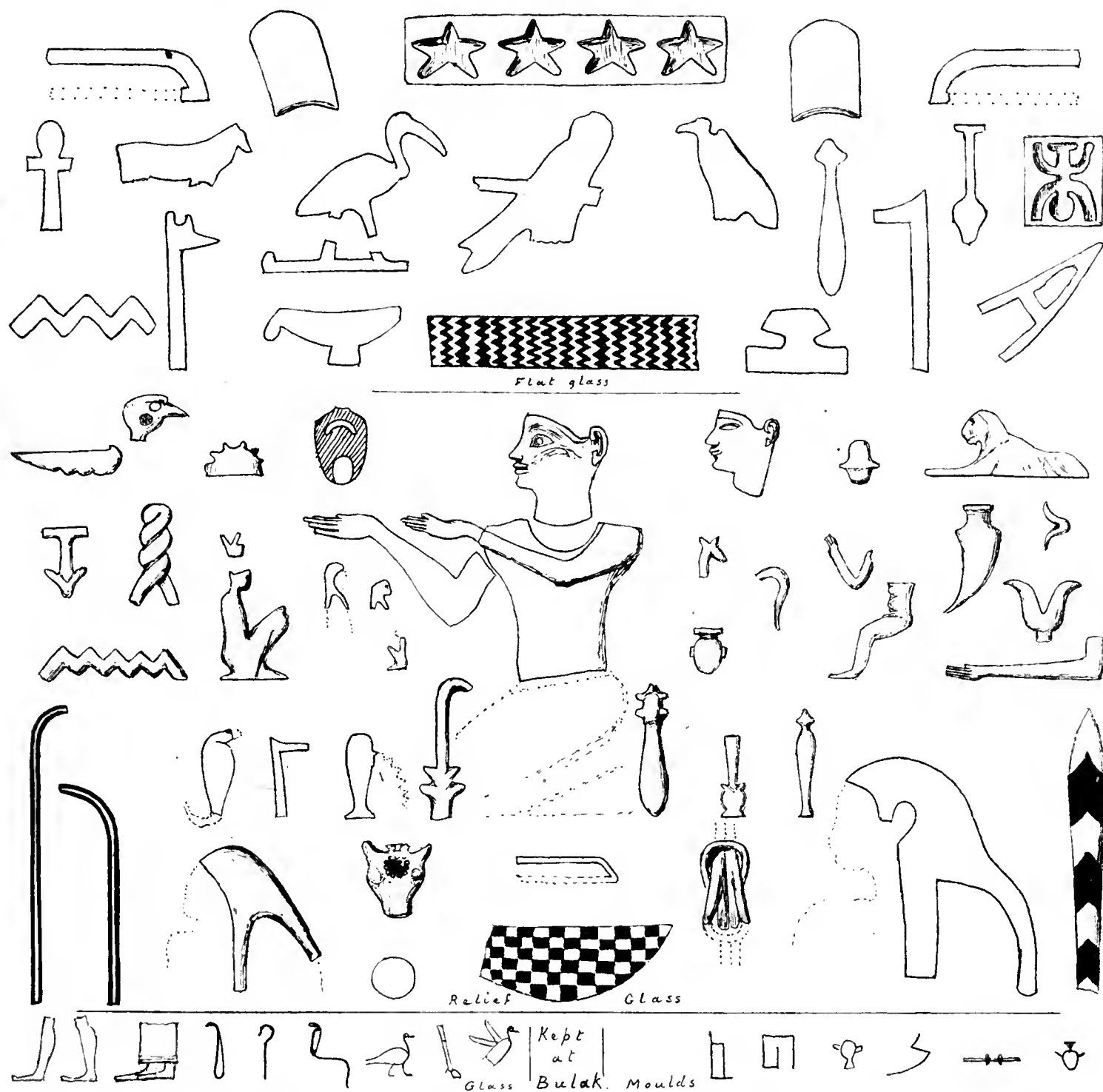


RUINS OF TOWN
TELL NEBESHEH.



These houses are of the Persian and Ptolemaic period. They have been thus far uncovered by the Arabs in digging for earth: they stand upon several yards depth of older remains.

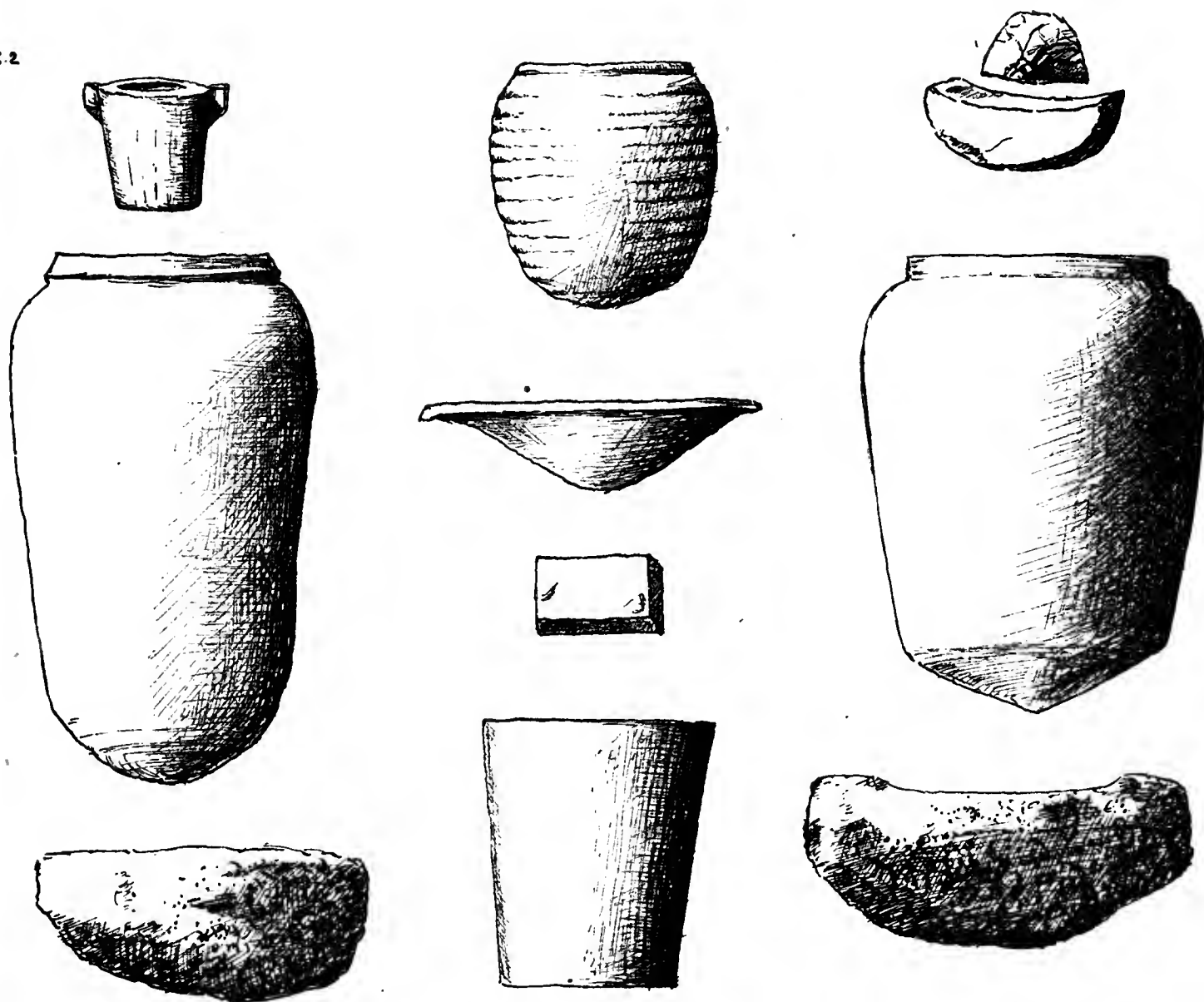
..... Road Lines



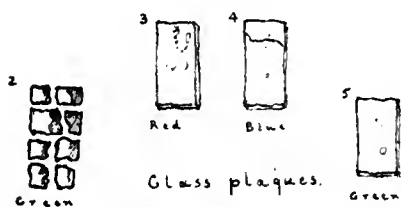
1:1



1:2



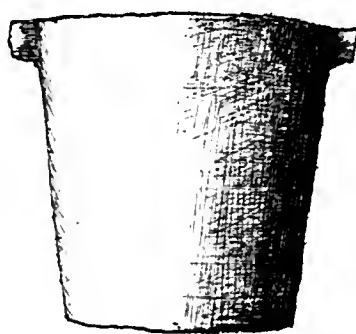
NEBESHEH. BUILDING IN CEMETERY. See PL. VI PLAN.



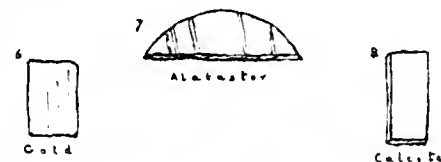
Glass plaques.



corn rubber



limestone



Gold

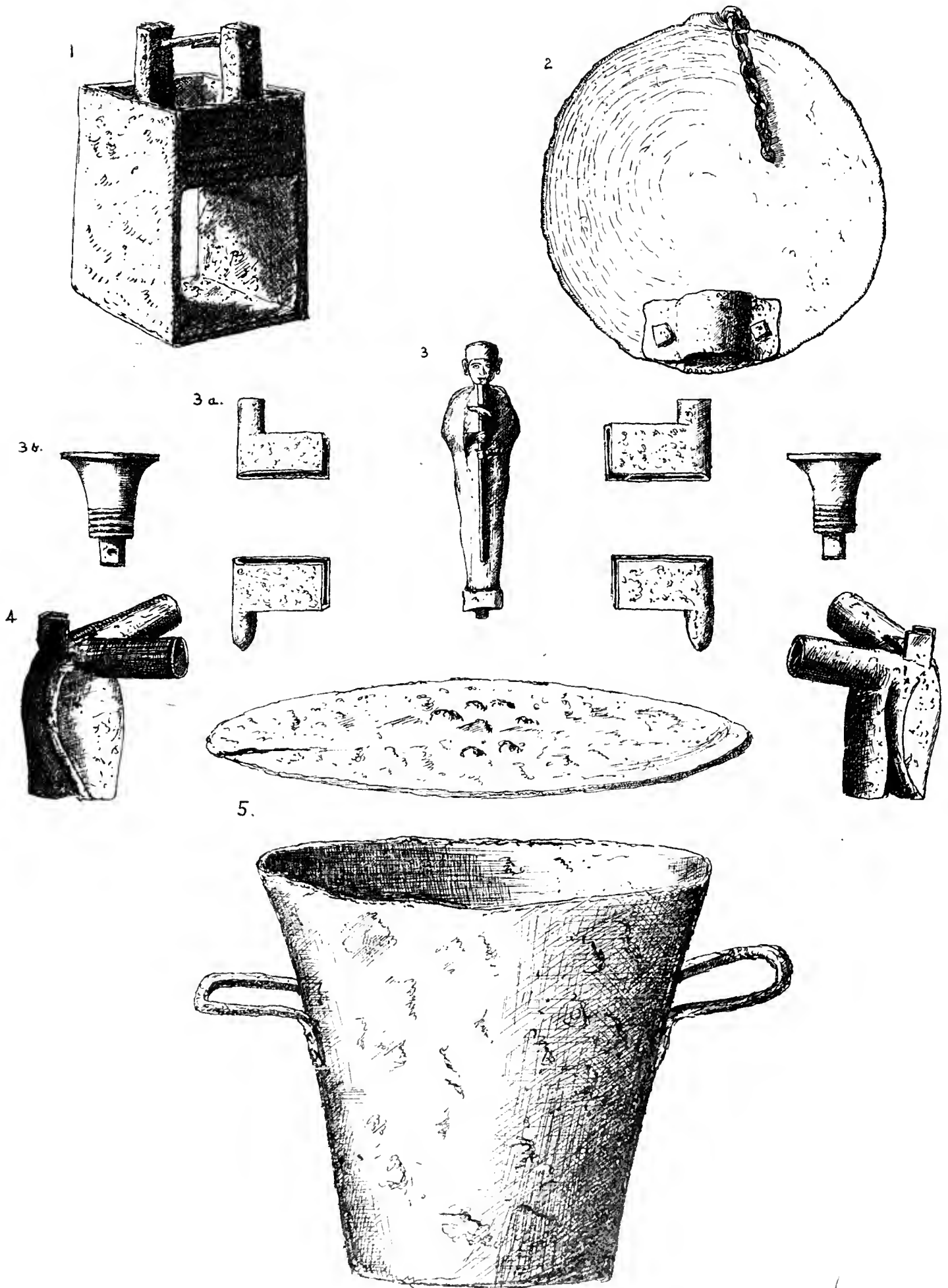
Alabaster

Calcareous

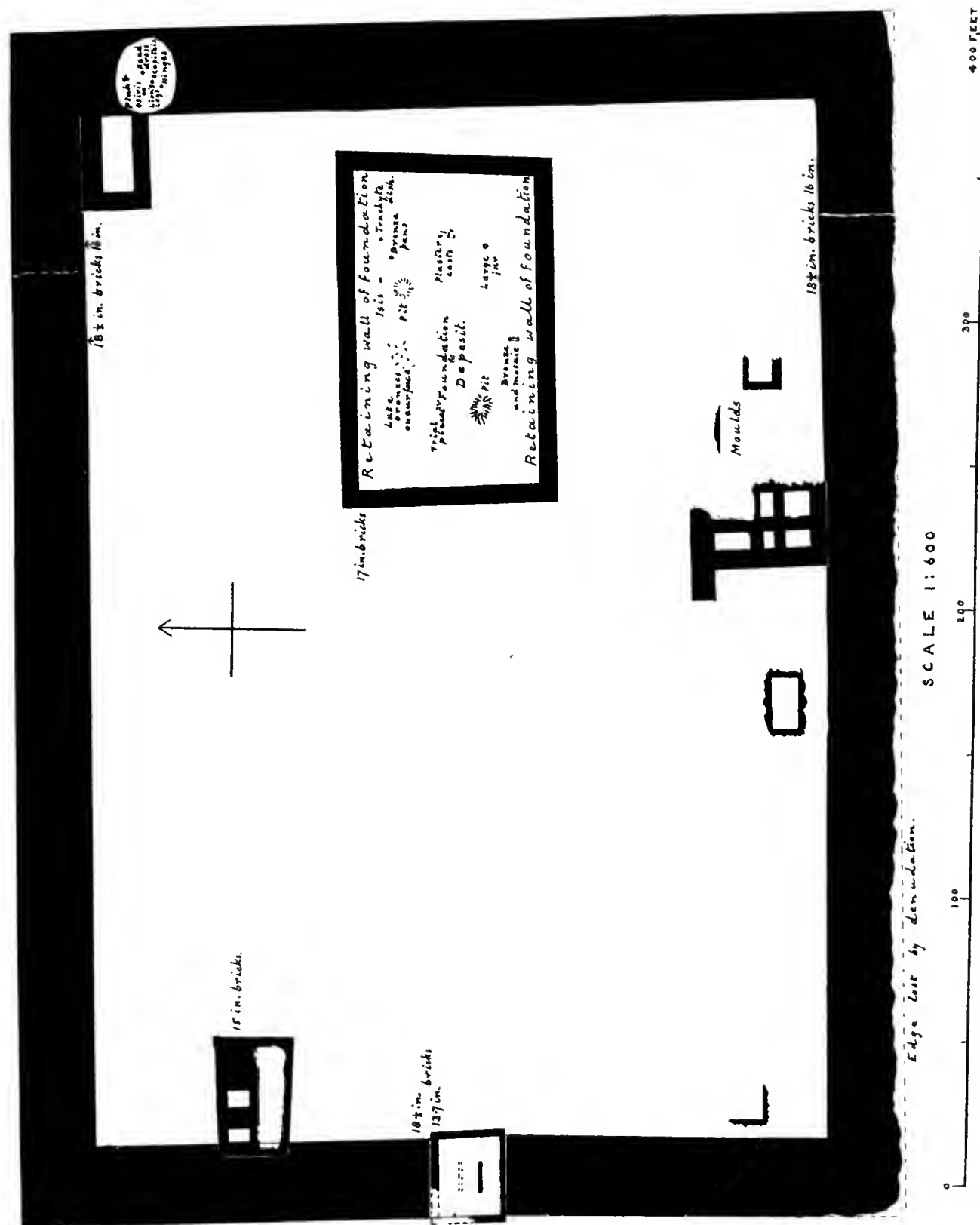


corn rubber.

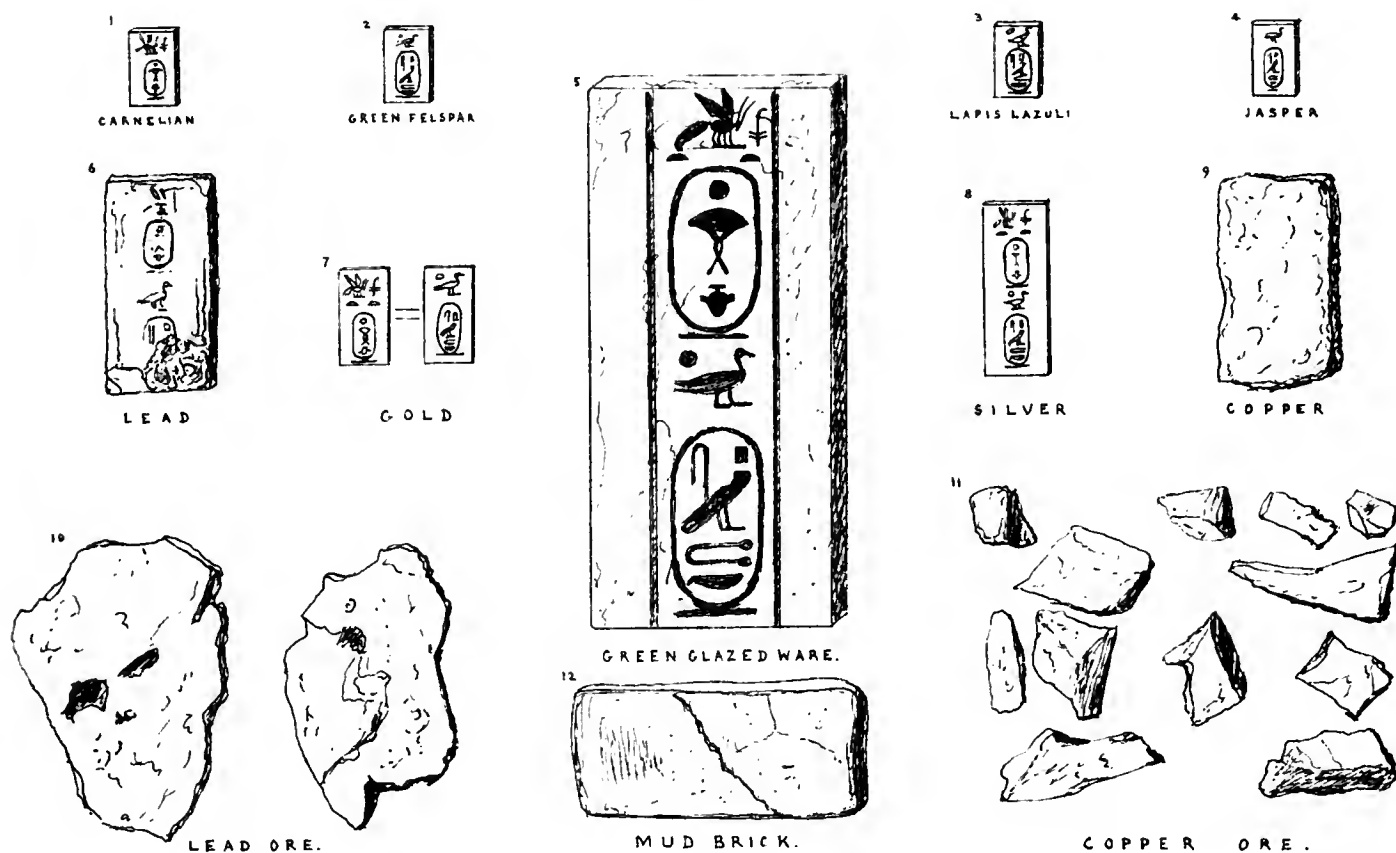
P.E.N. DEL.



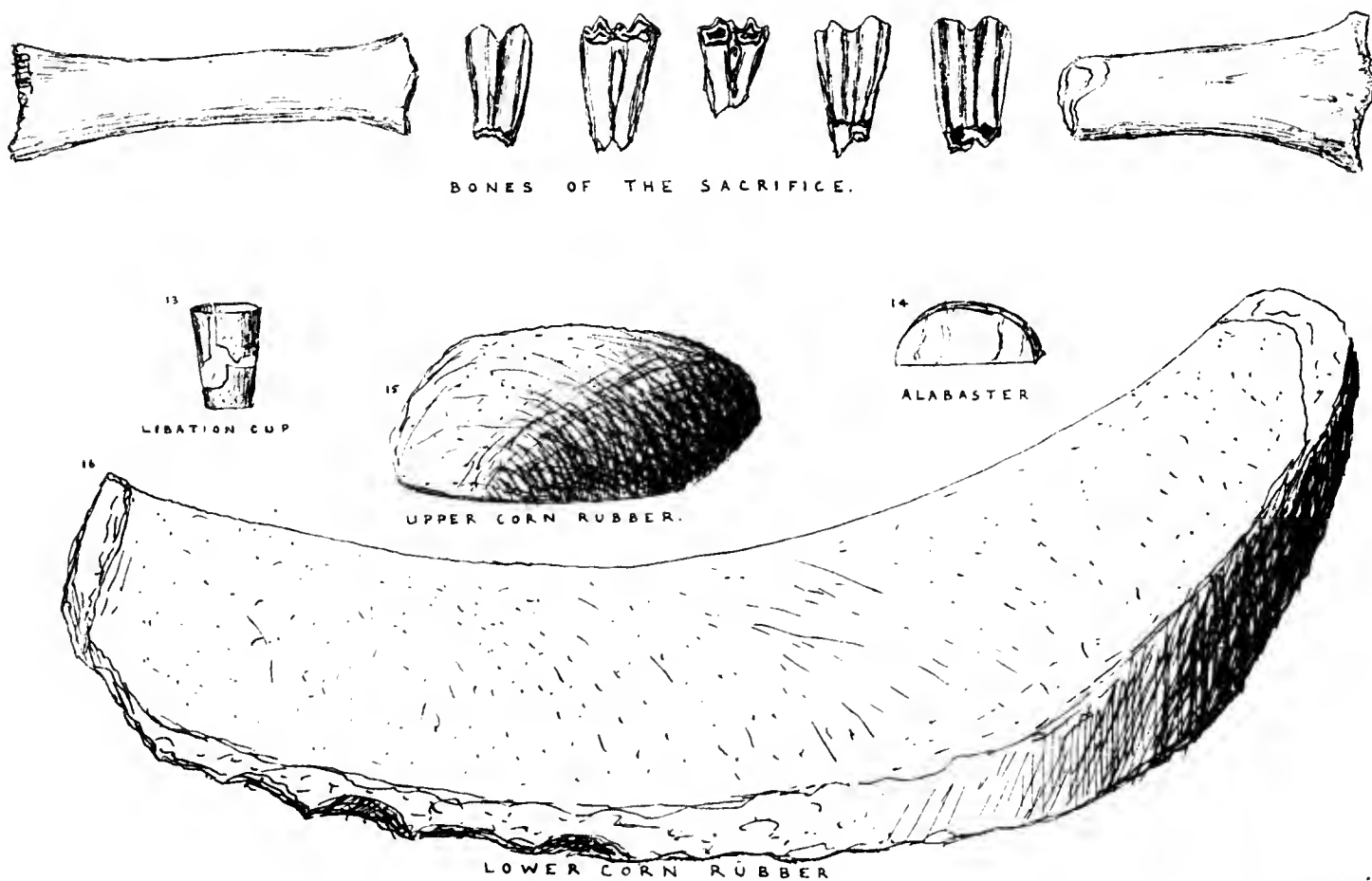
TEMENOS AND TEMPLE
TELL GEMAYEMI.



1:1

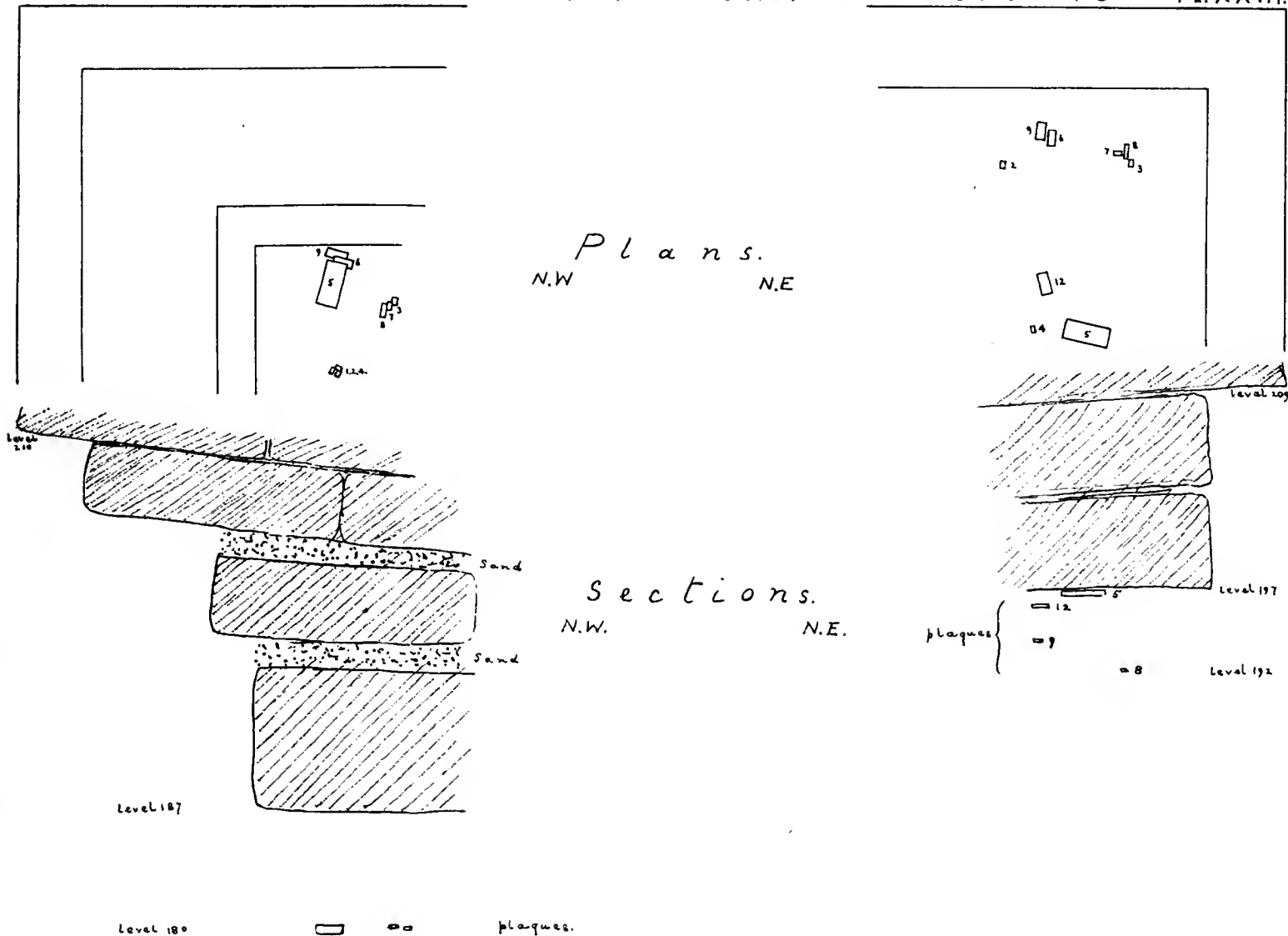


1:4



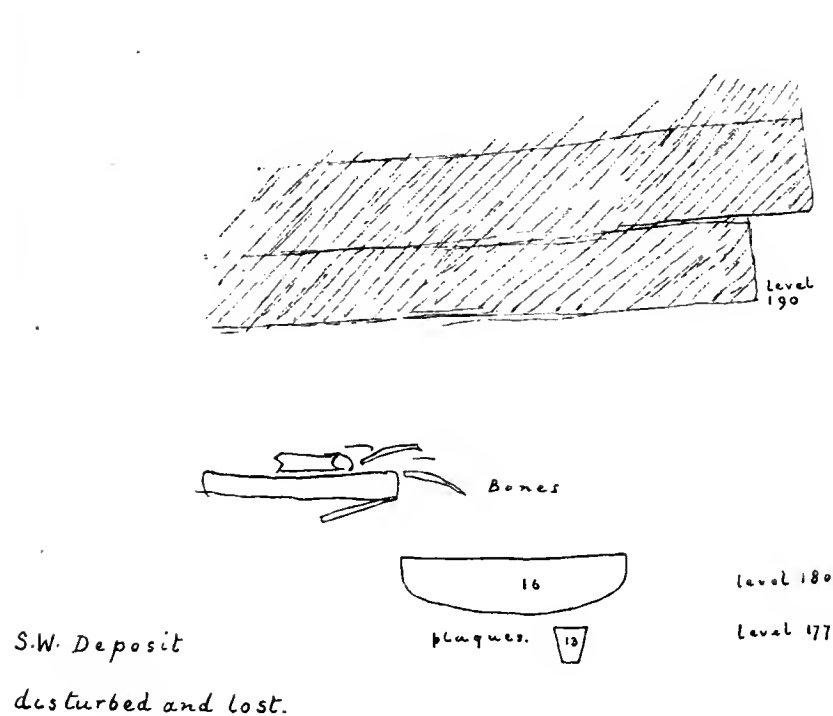
Plans.
N.W. N.E.

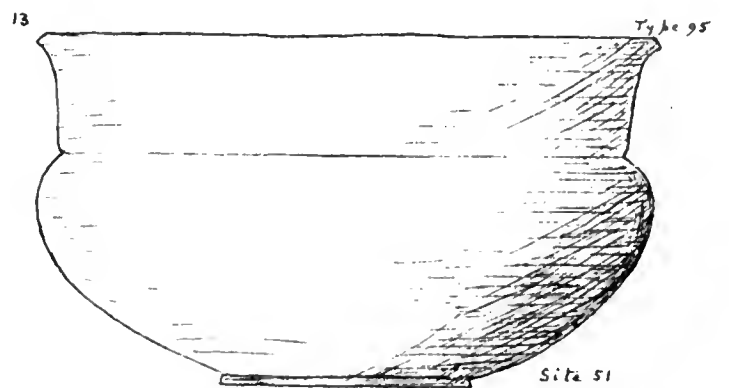
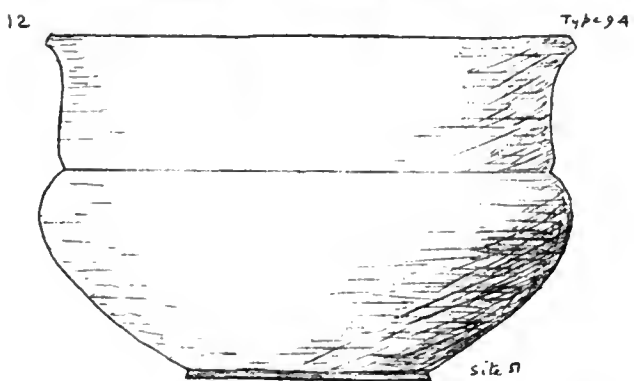
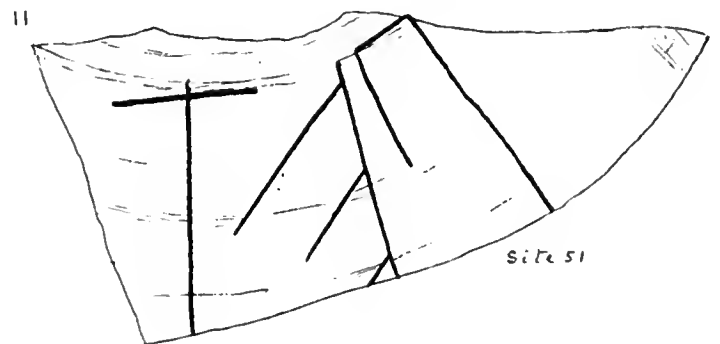
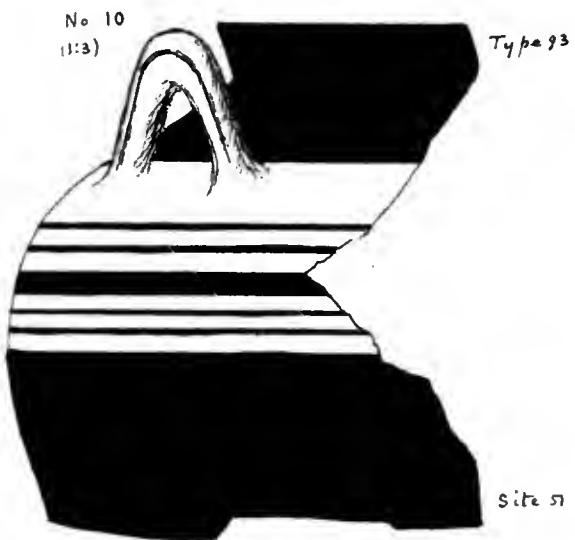
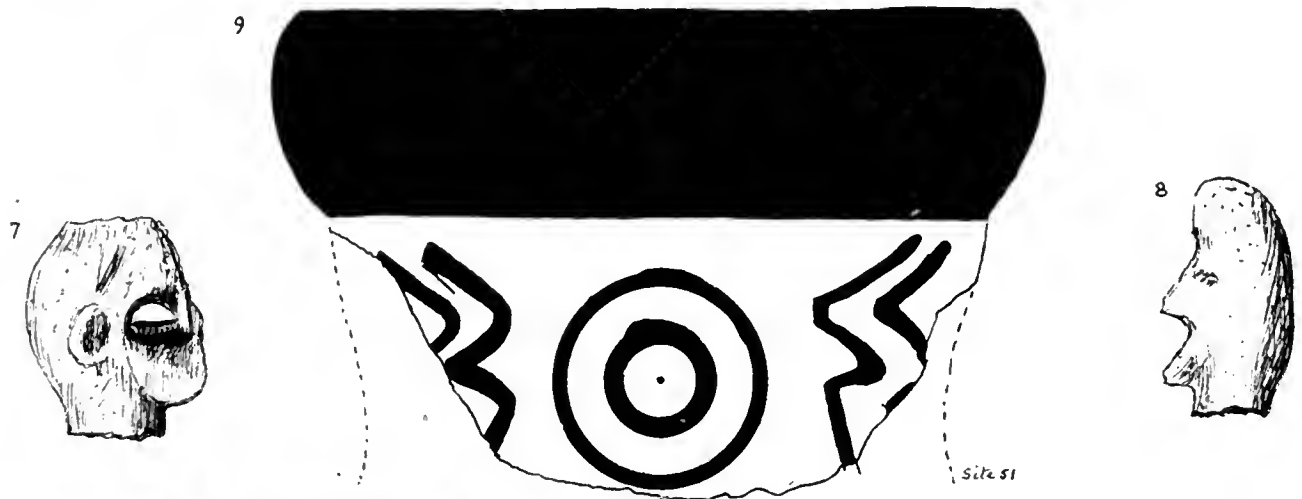
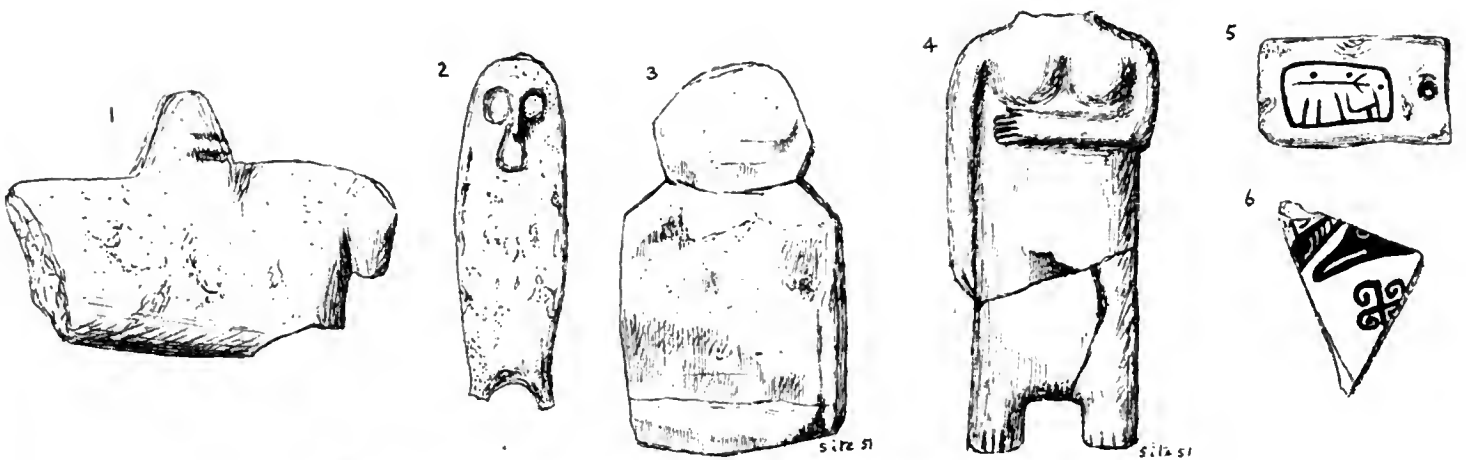
Sections.
N.W. N.E.

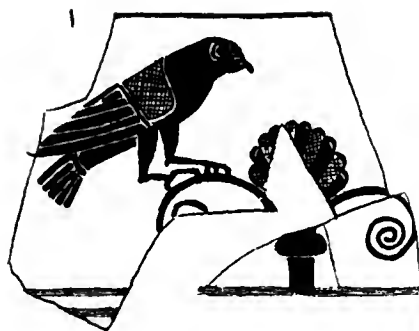


Section. S.E.

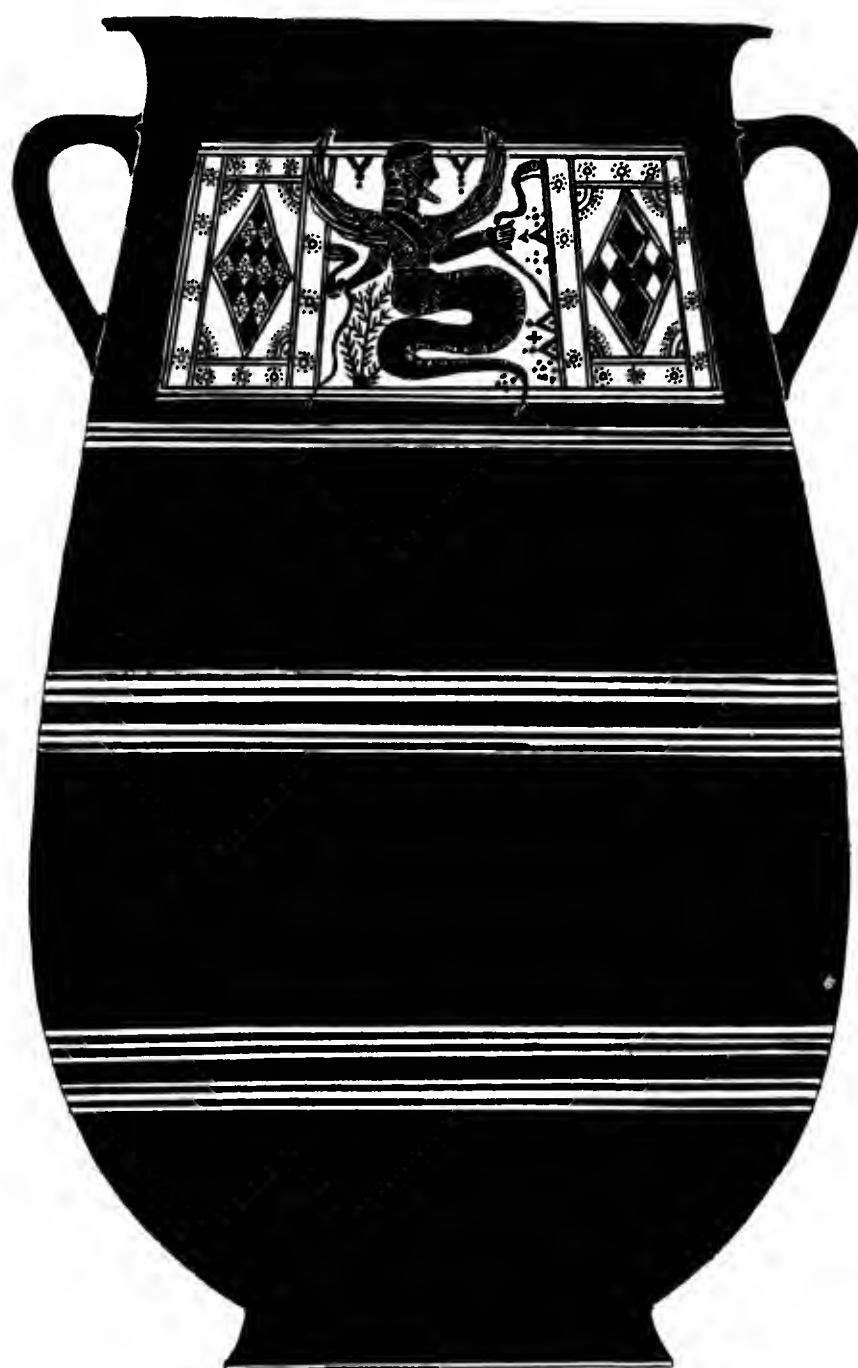
Plan S.E.

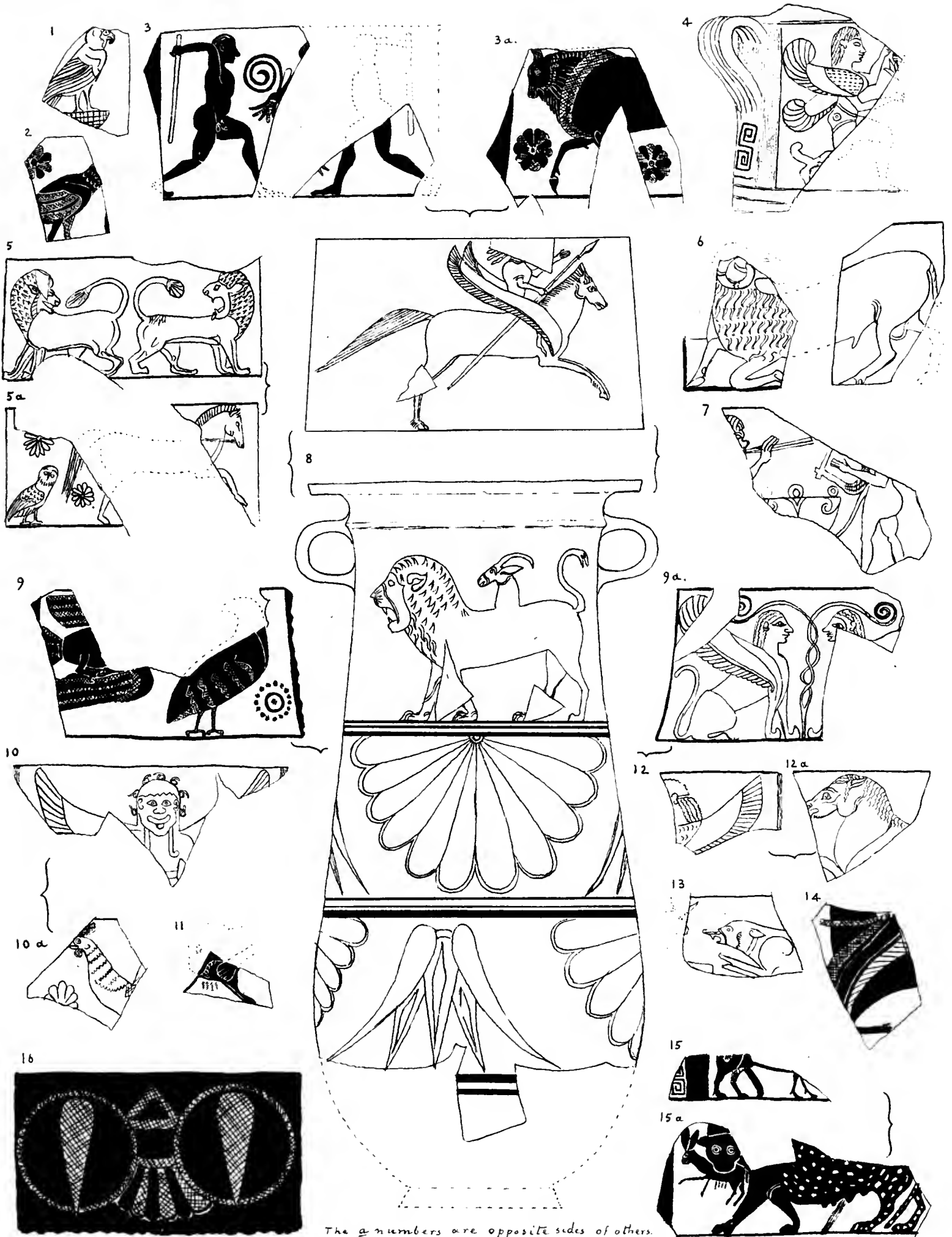






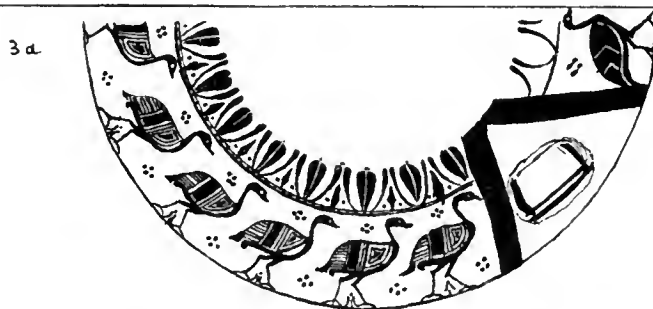
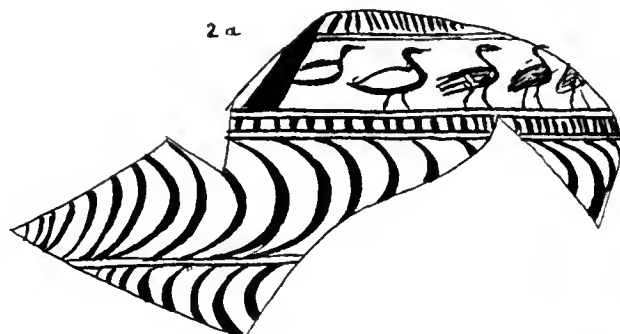
3





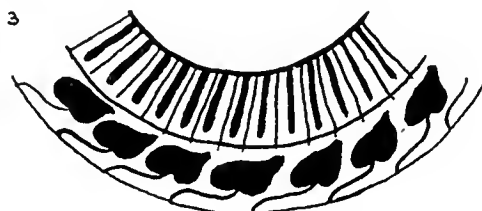
The a numbers are opposite sides of others.

W. M. F. P. del.





On shoulder of a similar vase.



Pattern on shoulder and figures on similar vase.



Painted on a base



11



2



3

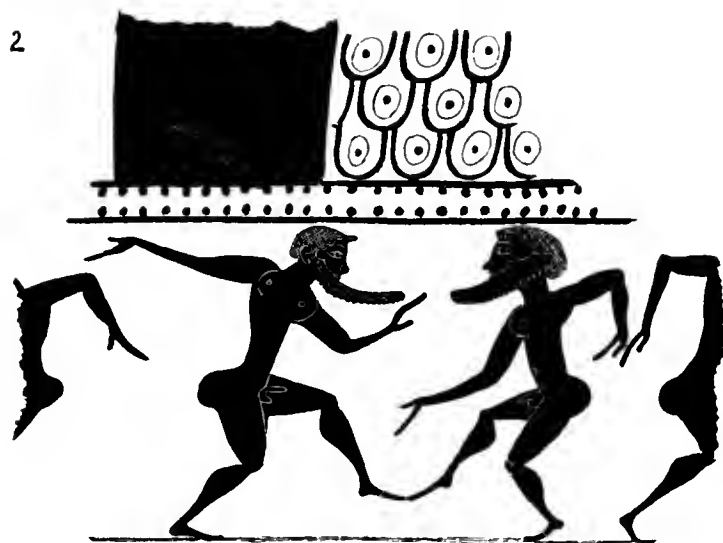


4



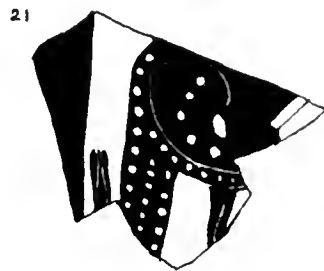
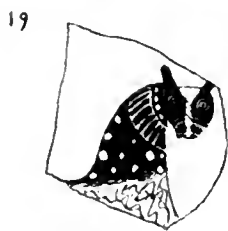
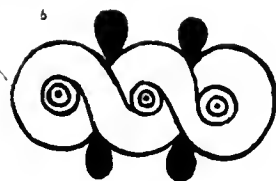
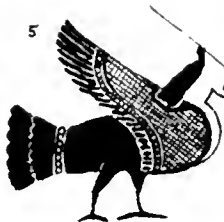
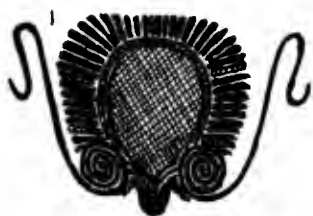


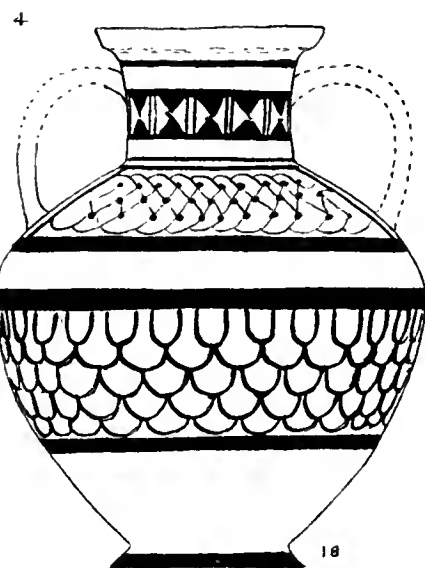
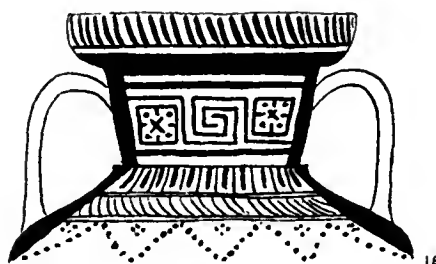
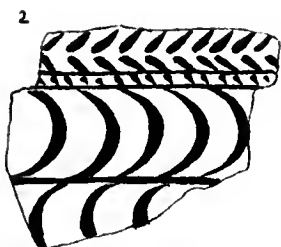
2



3



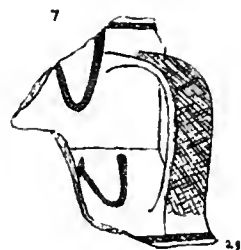
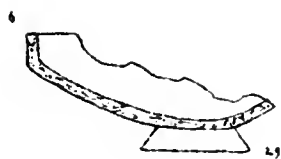
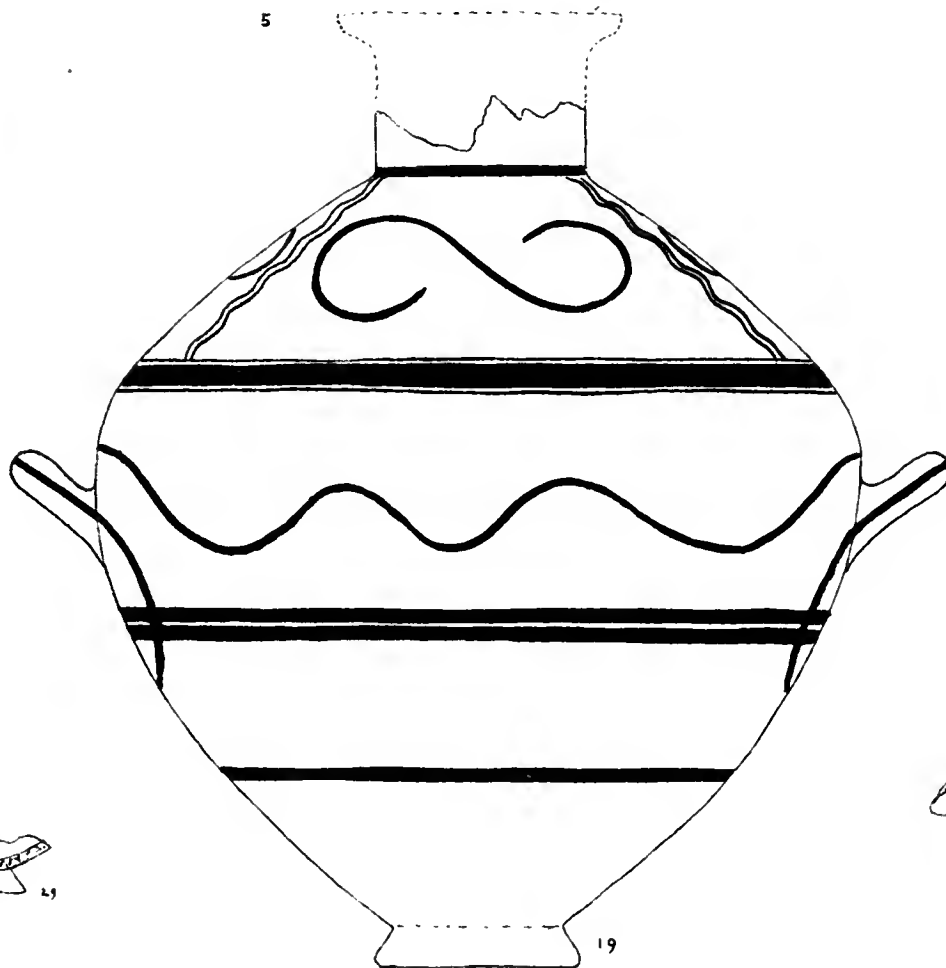


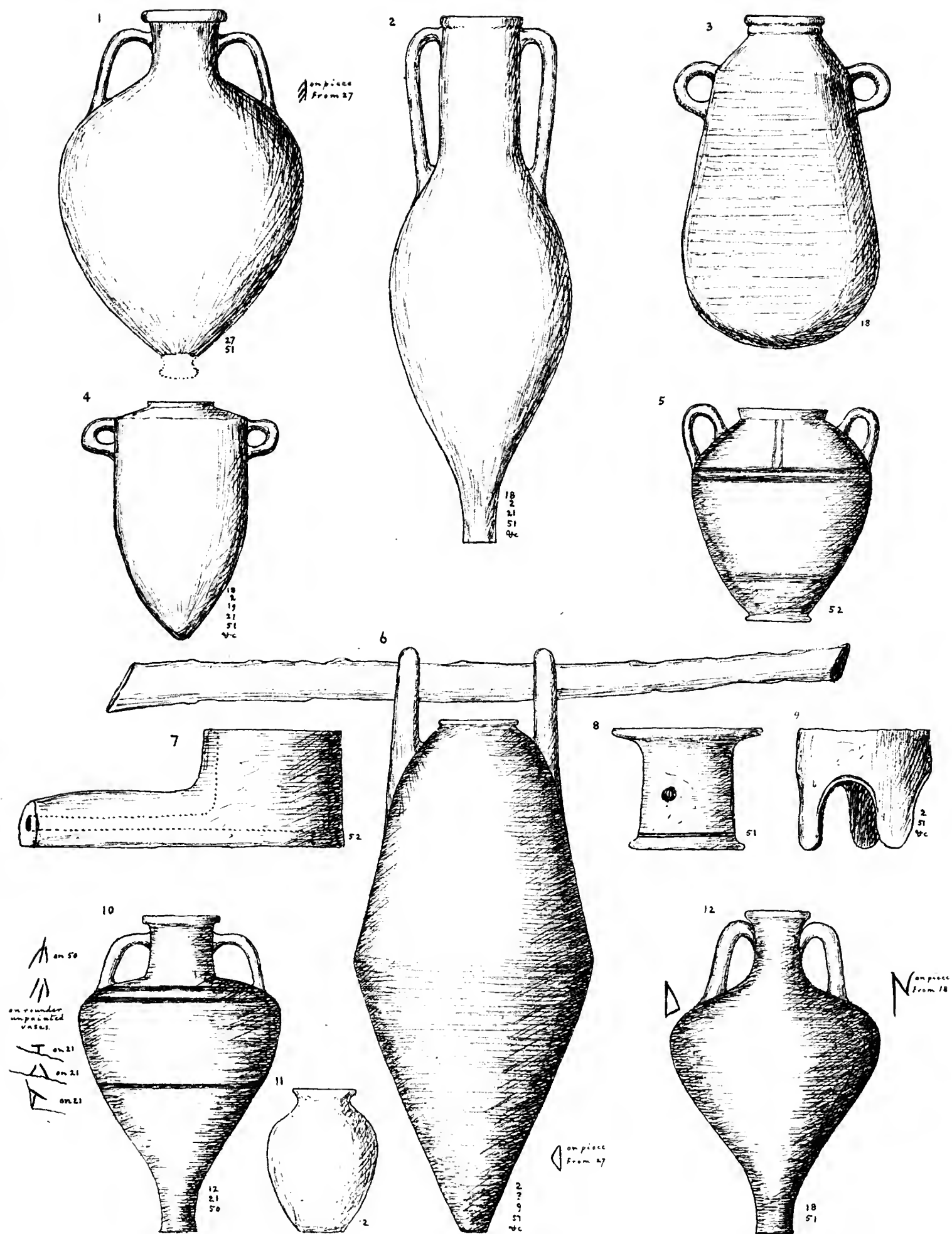


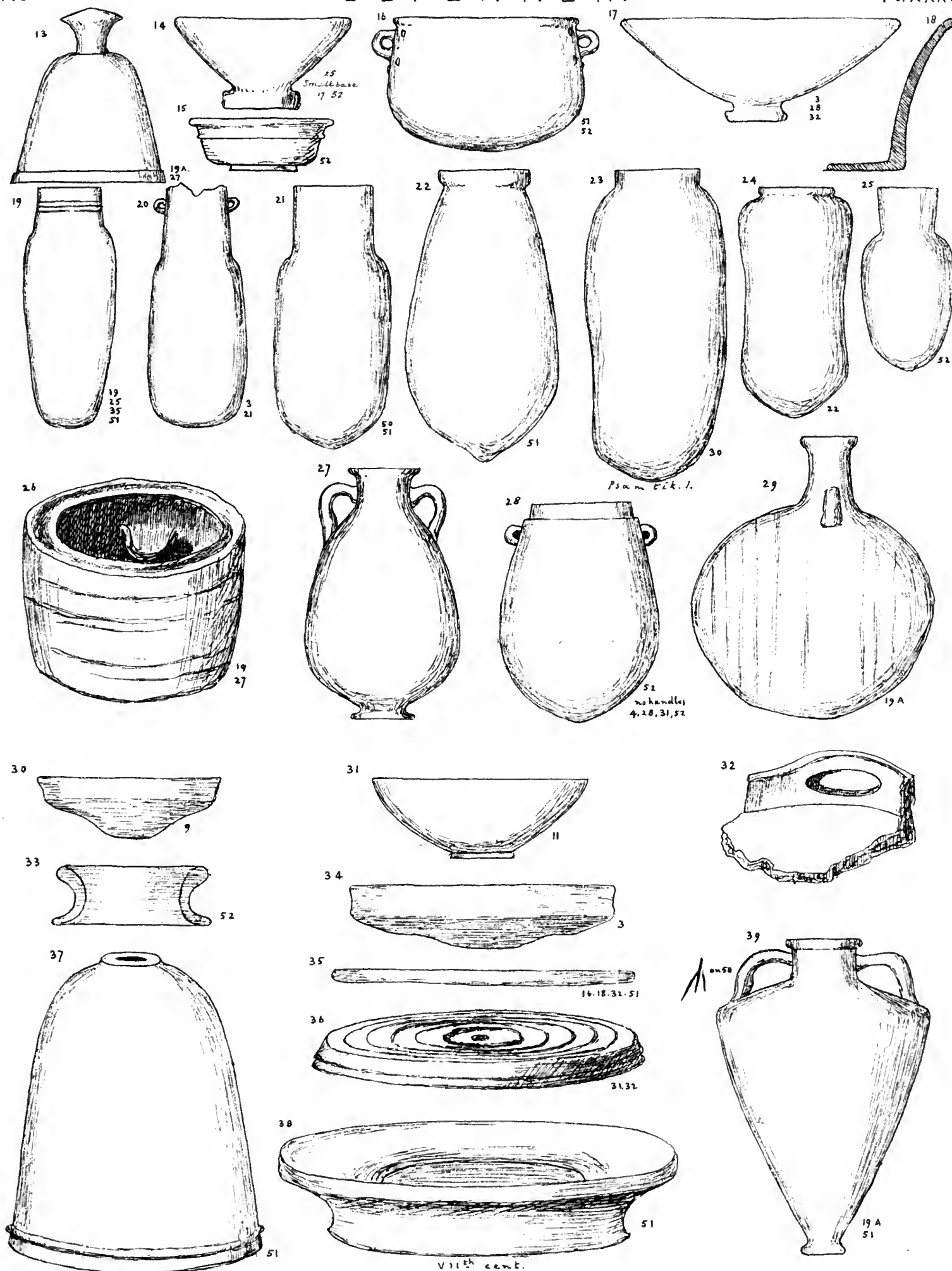
Painted on bases
of black and buff.

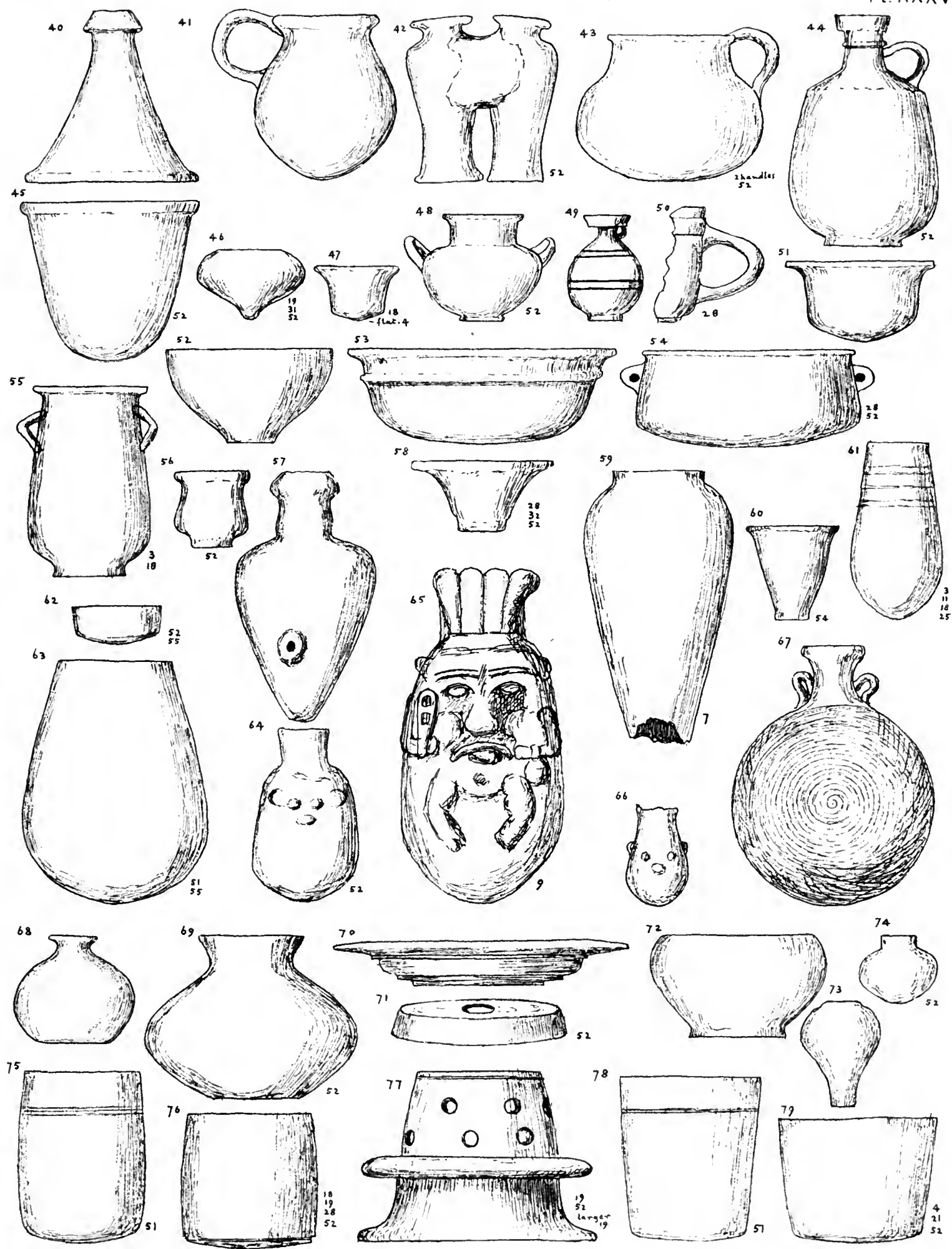


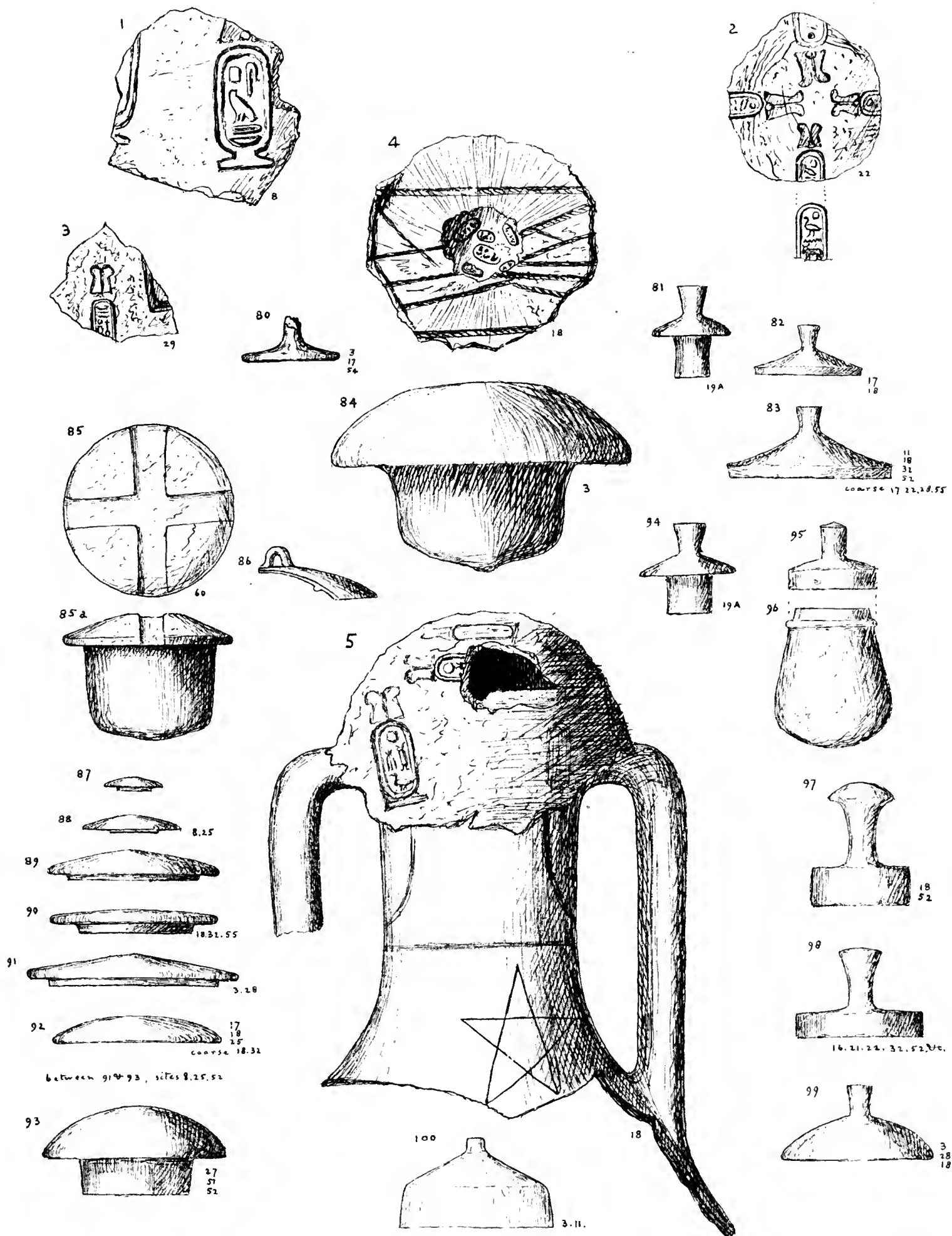
Painted on bases
of black and buff.

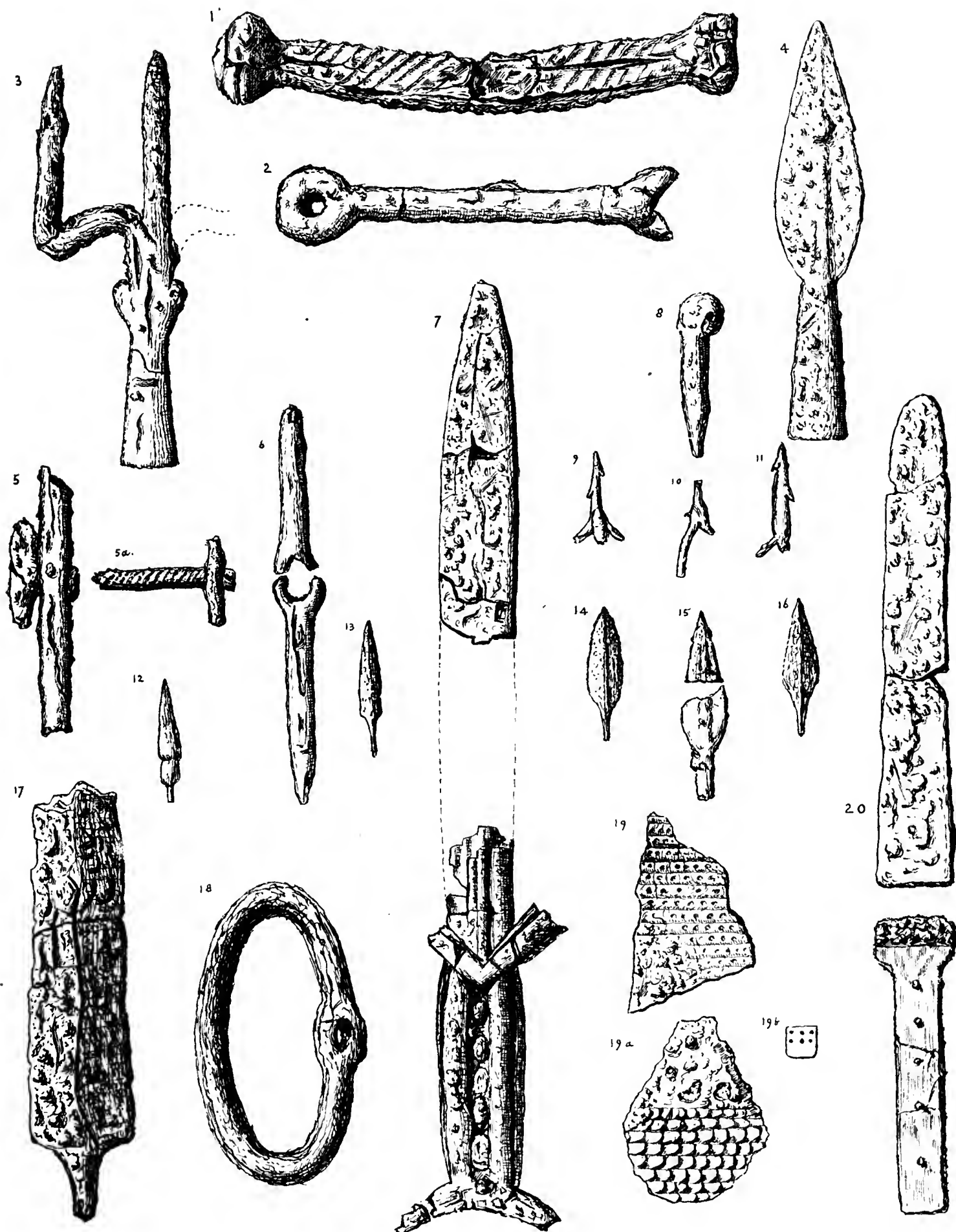


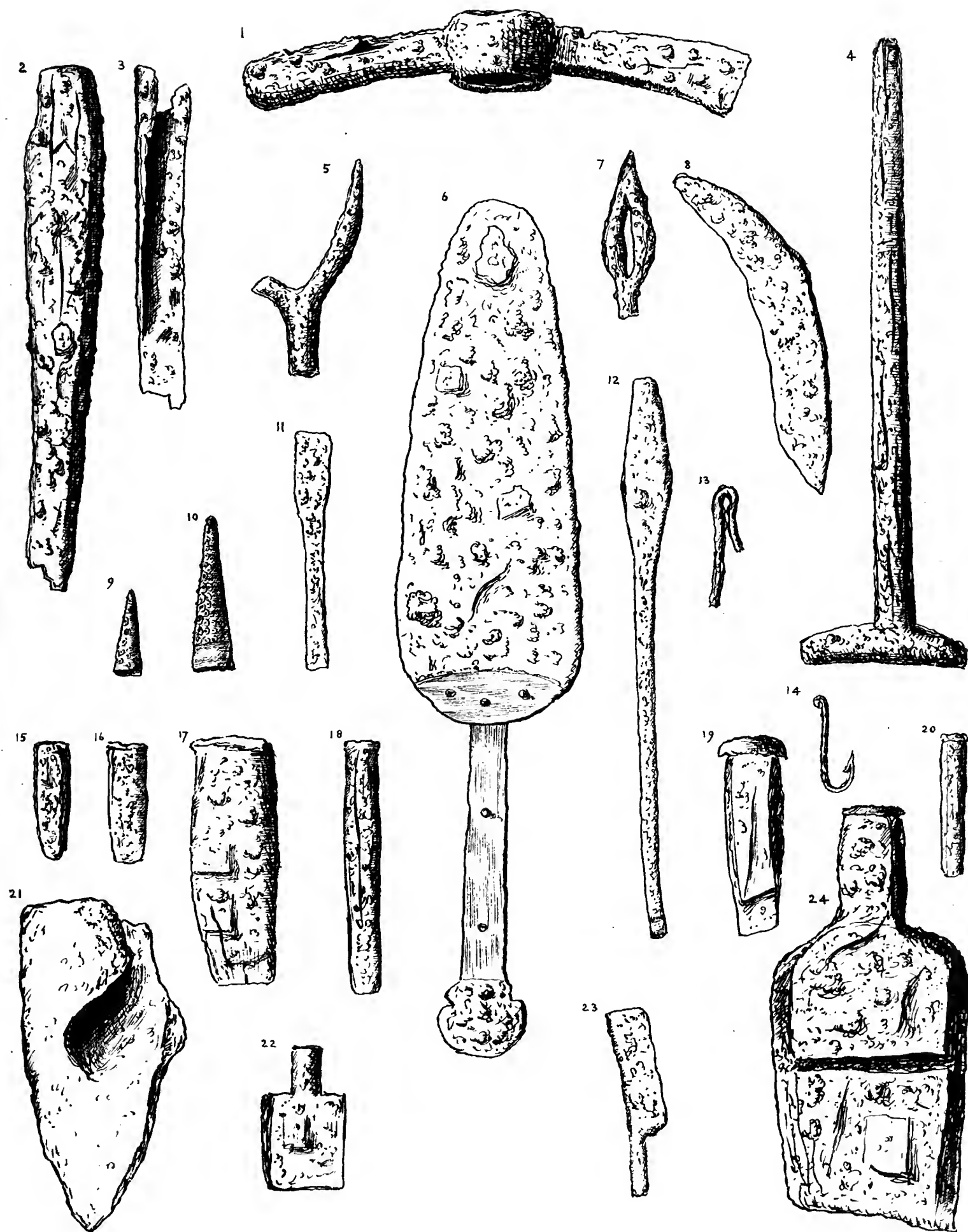


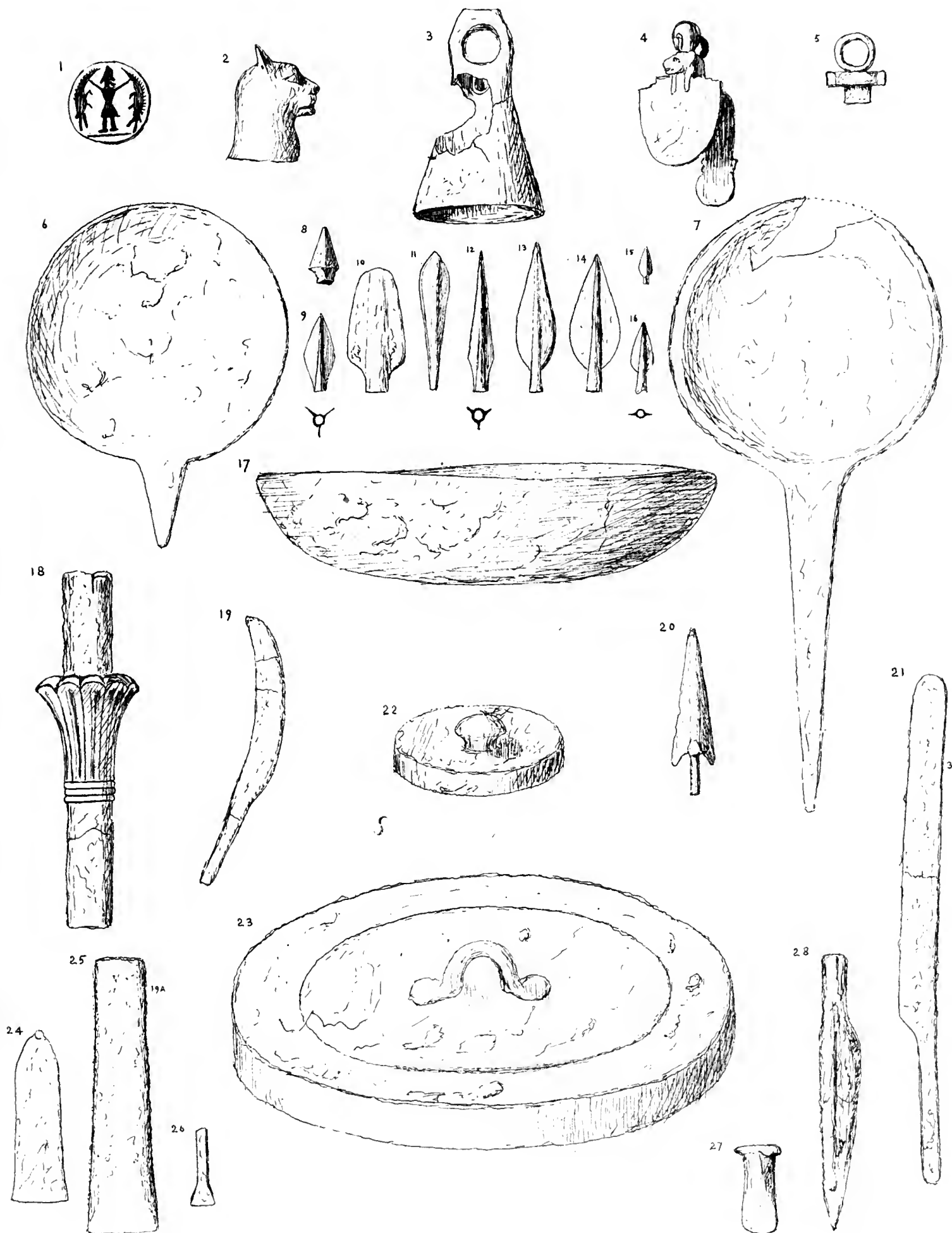


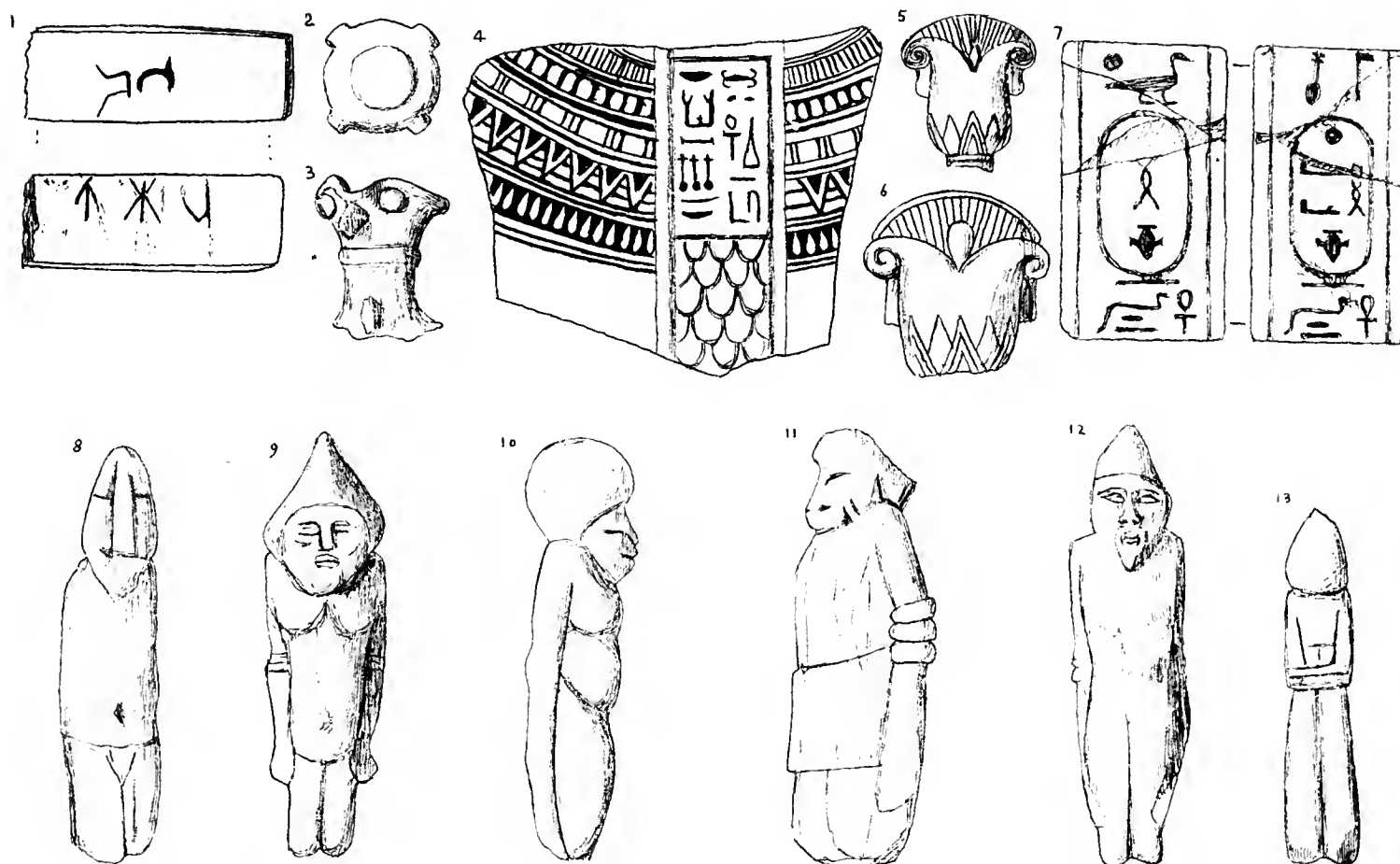




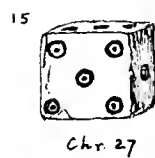
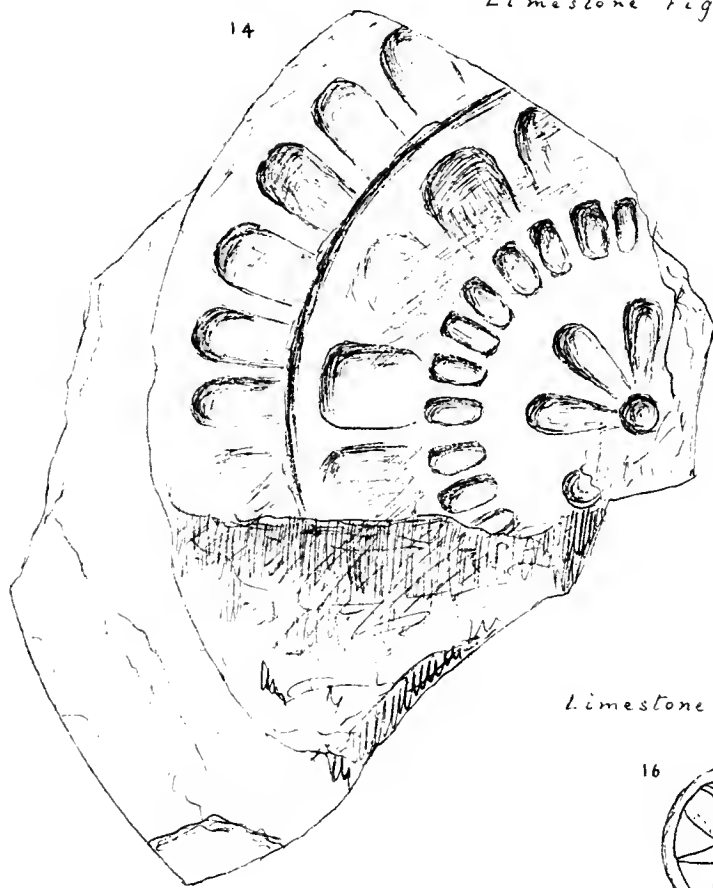




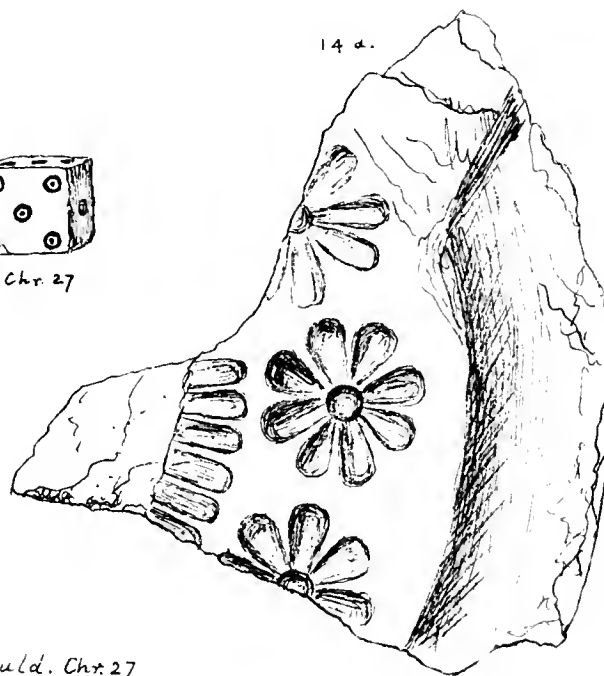




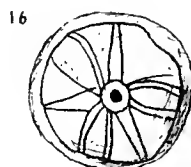
Limestone figures of captives.



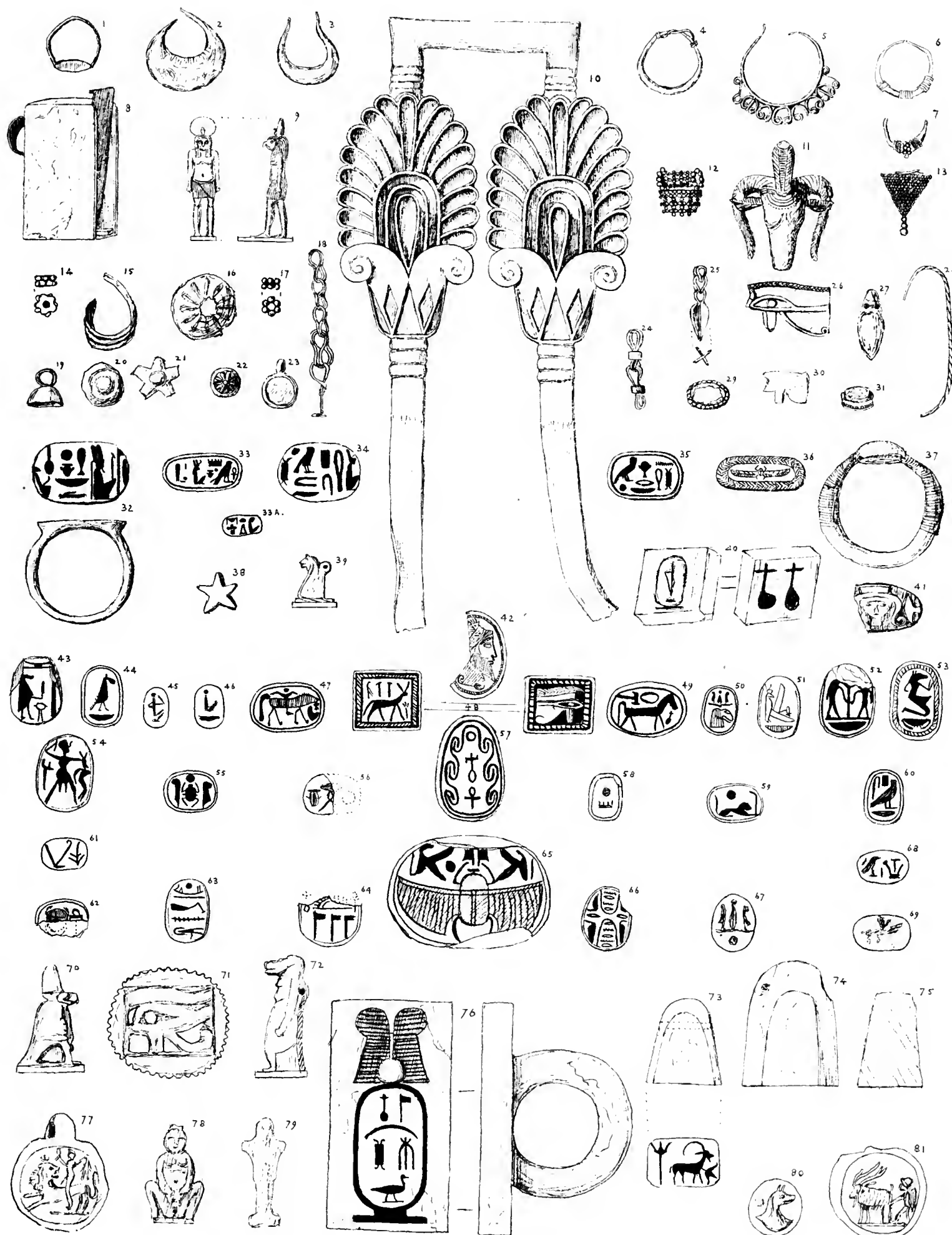
Chr 27



Limestone cake-mould. Chr 27



Graved Shell Button.



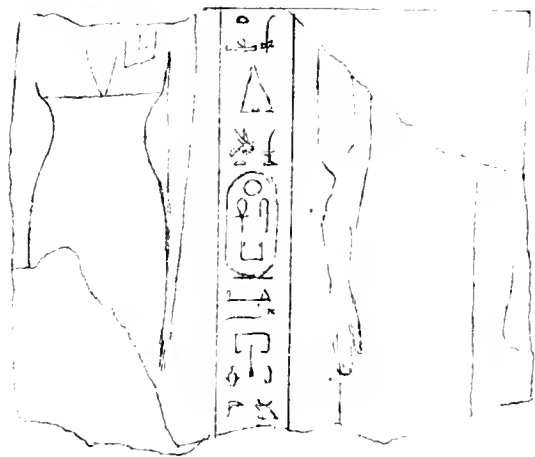
Menage.



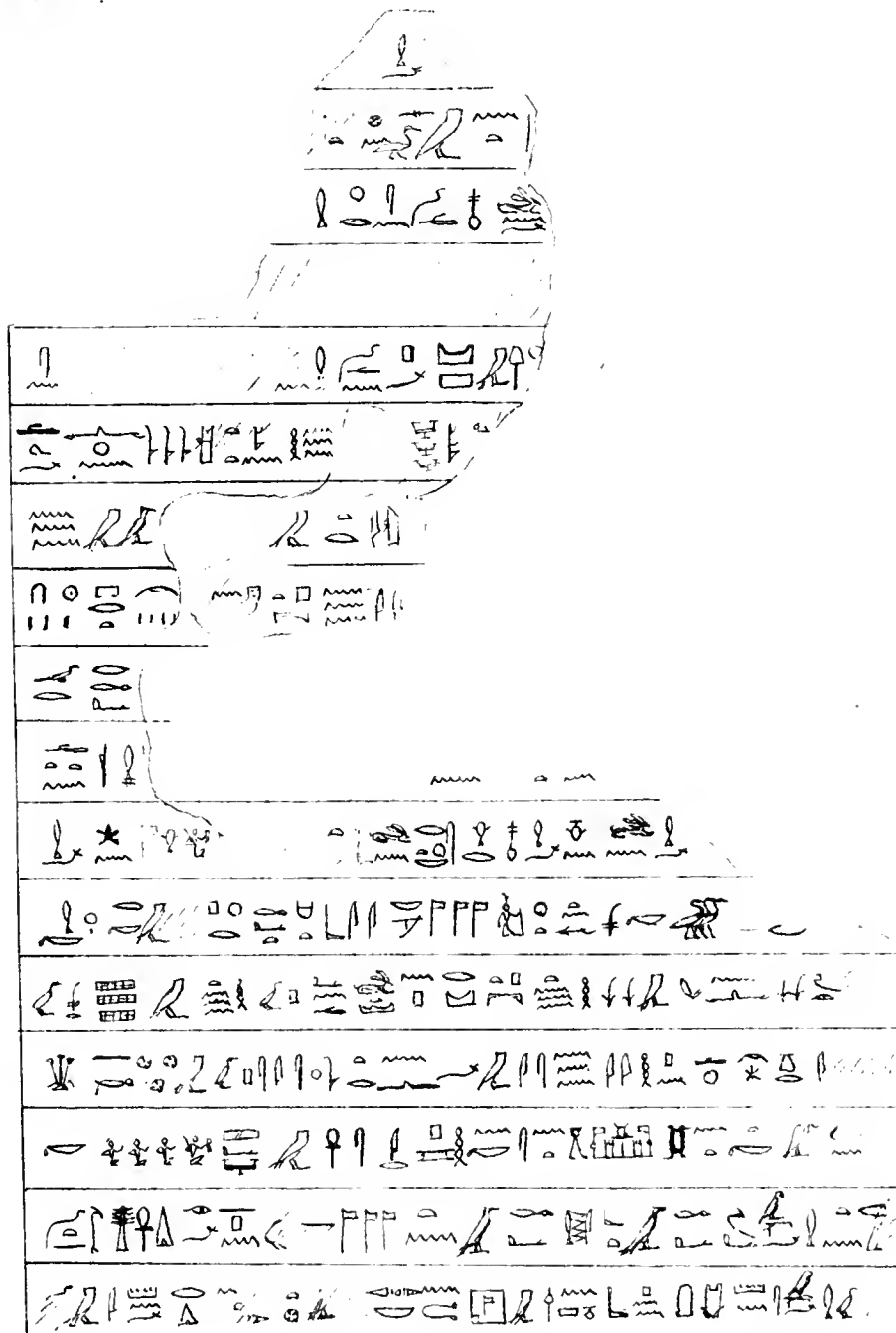
Scarab
bought in
Alexandria

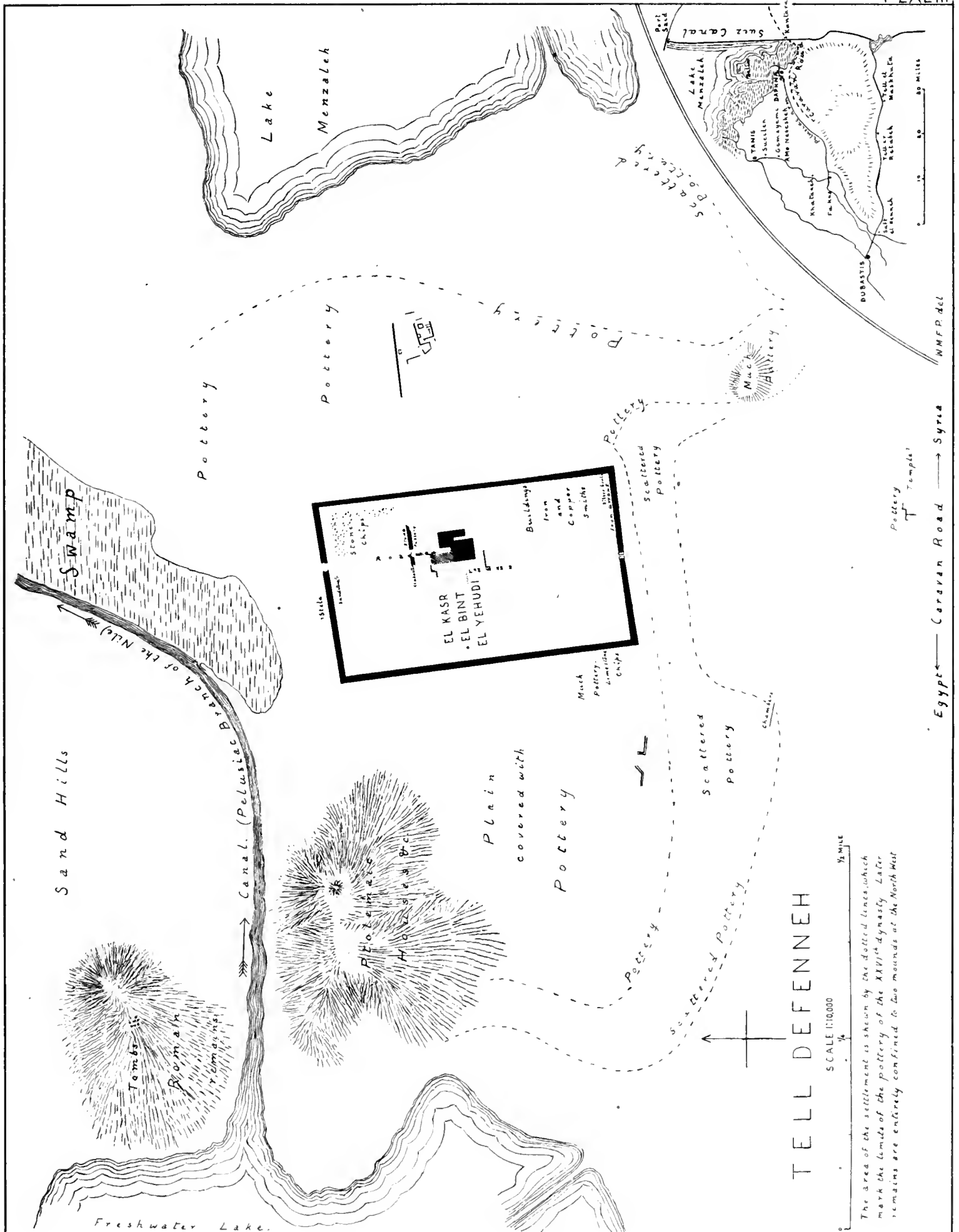


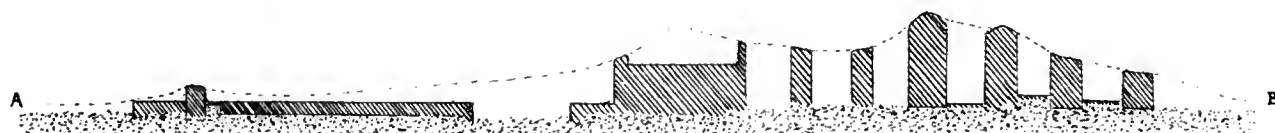
1:2 Khata'ne



1:8 Defench.

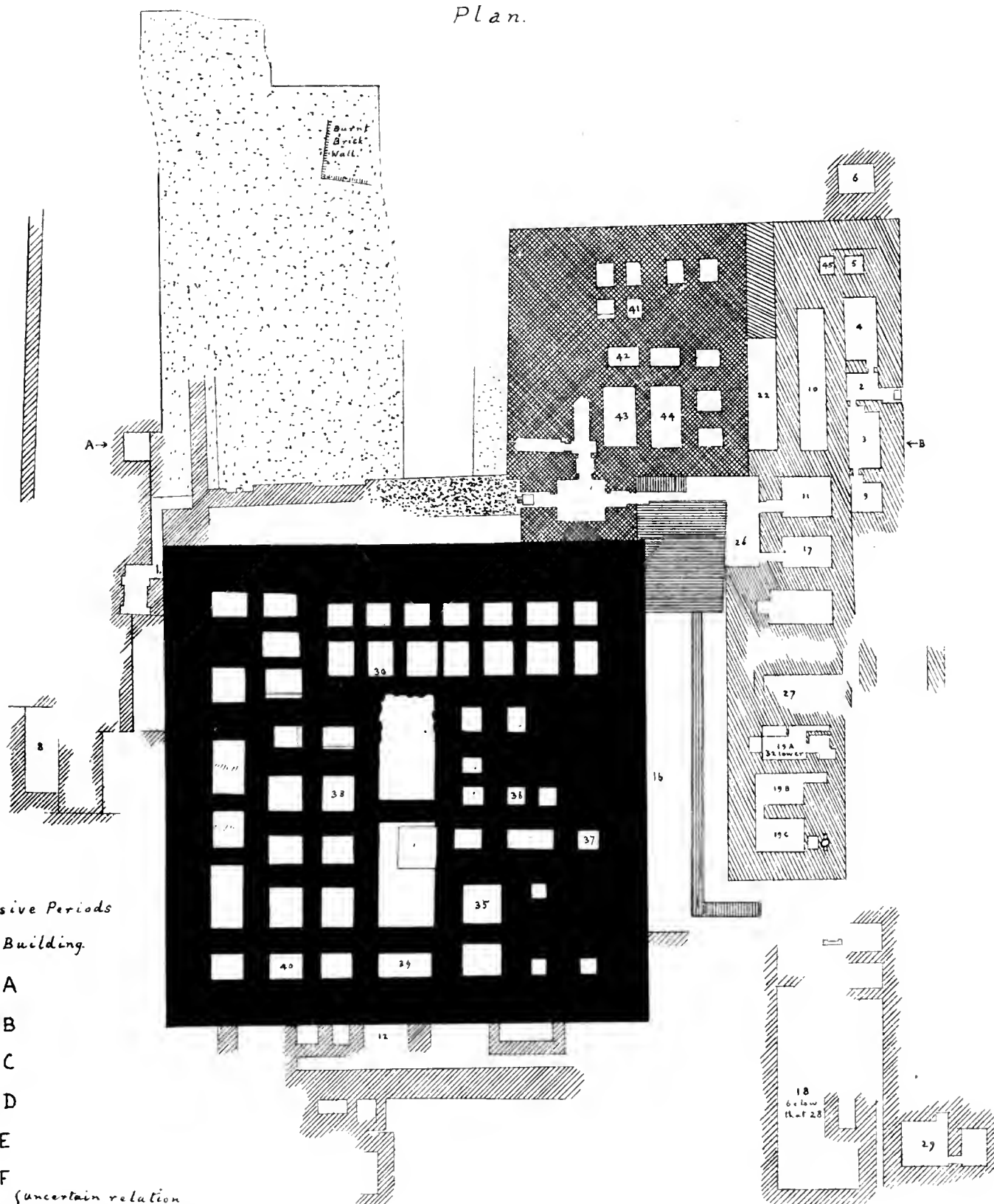






Section.

Plan.



Successive Periods
of Building.



A



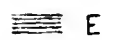
B



C



D

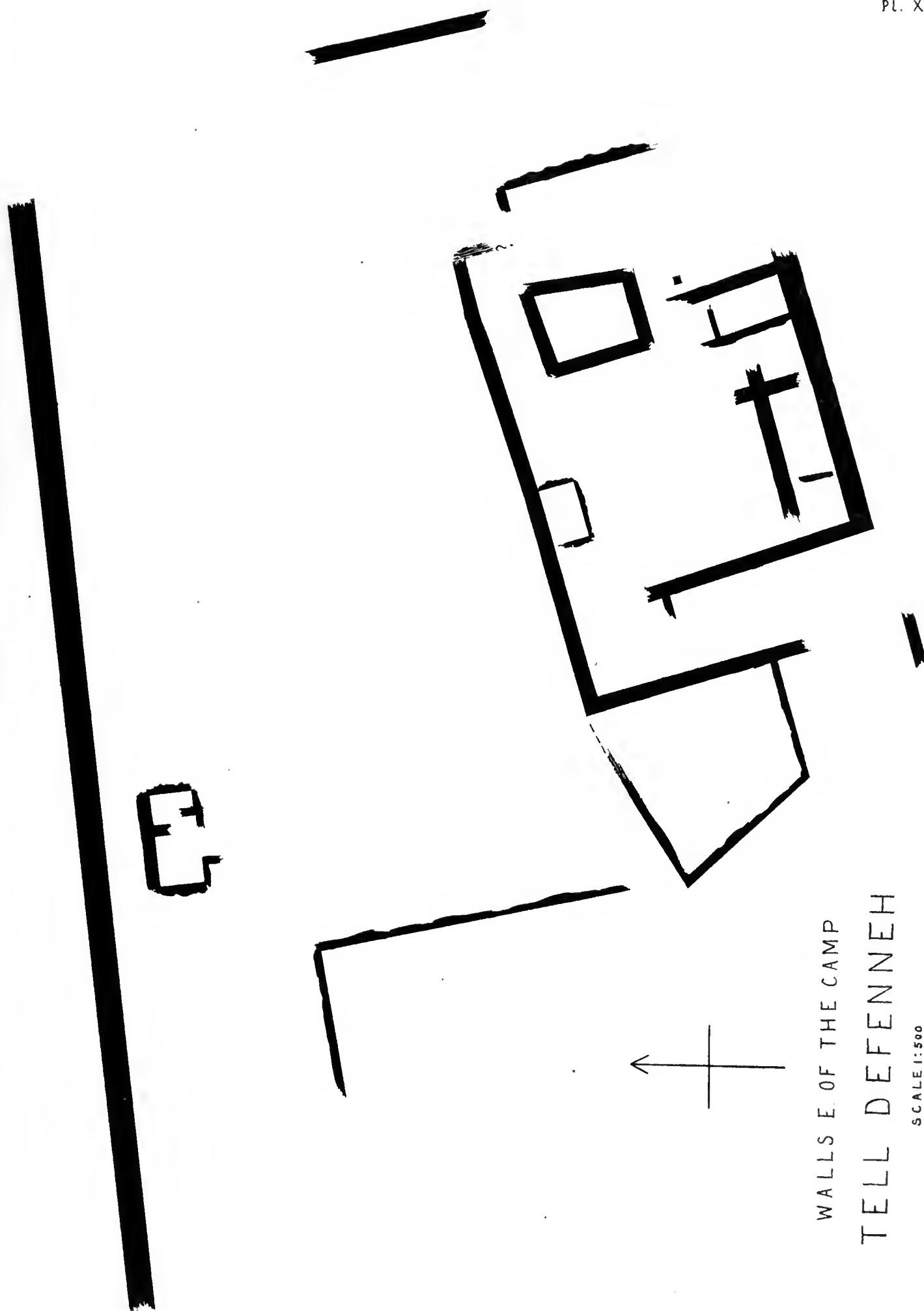


E



F

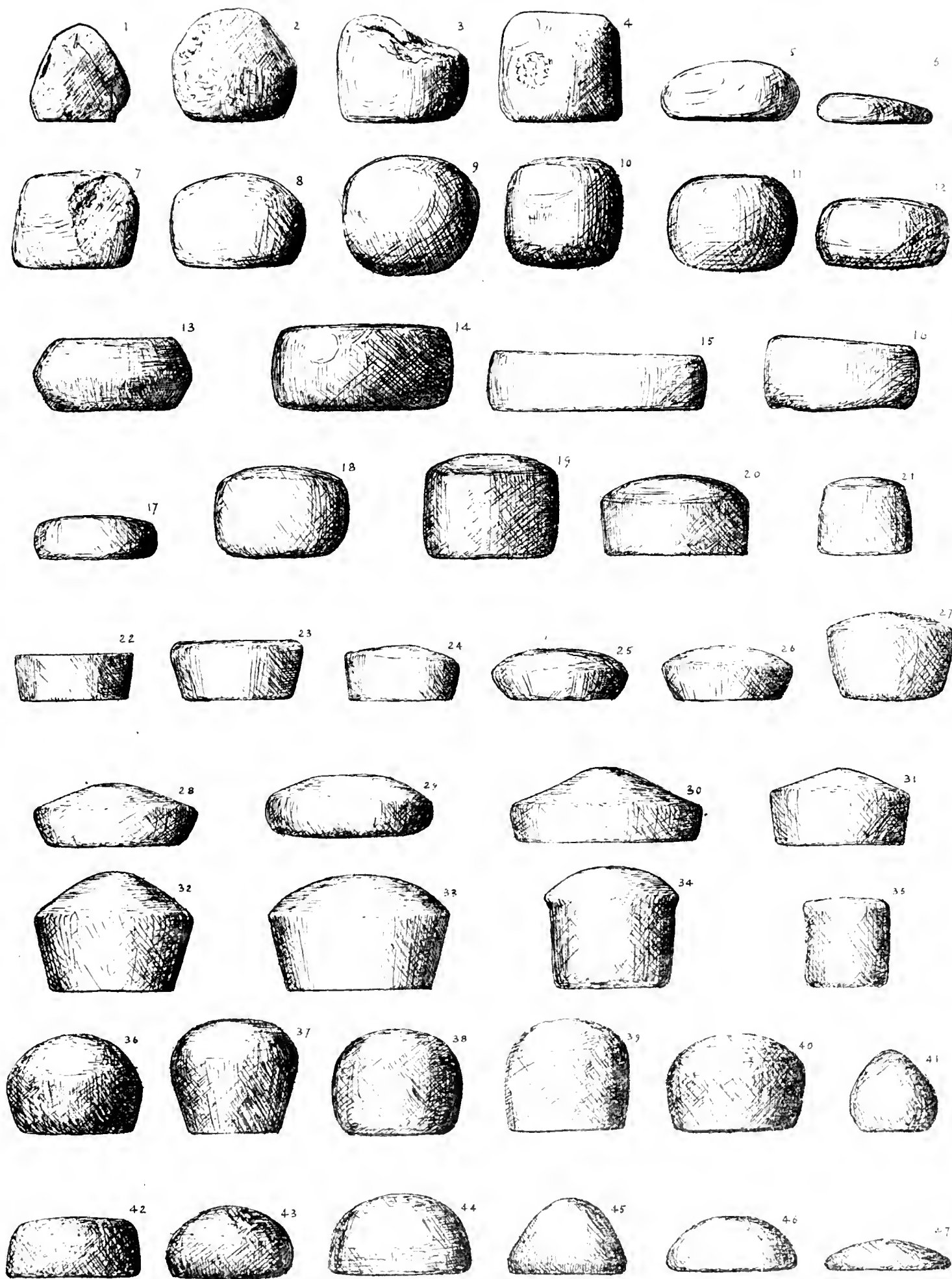
////// G {uncertain relation
to others; but of Psamtik, mostly.

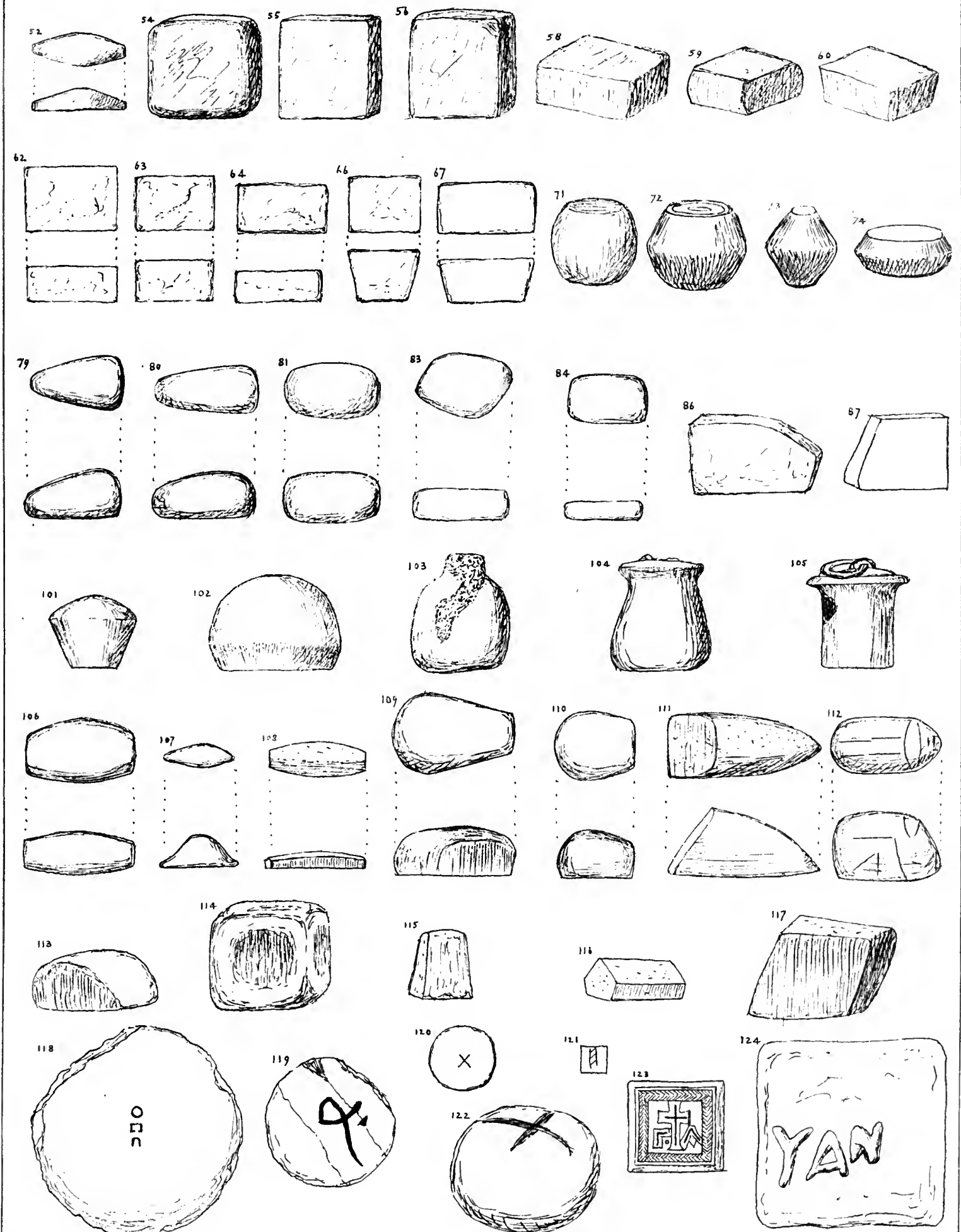


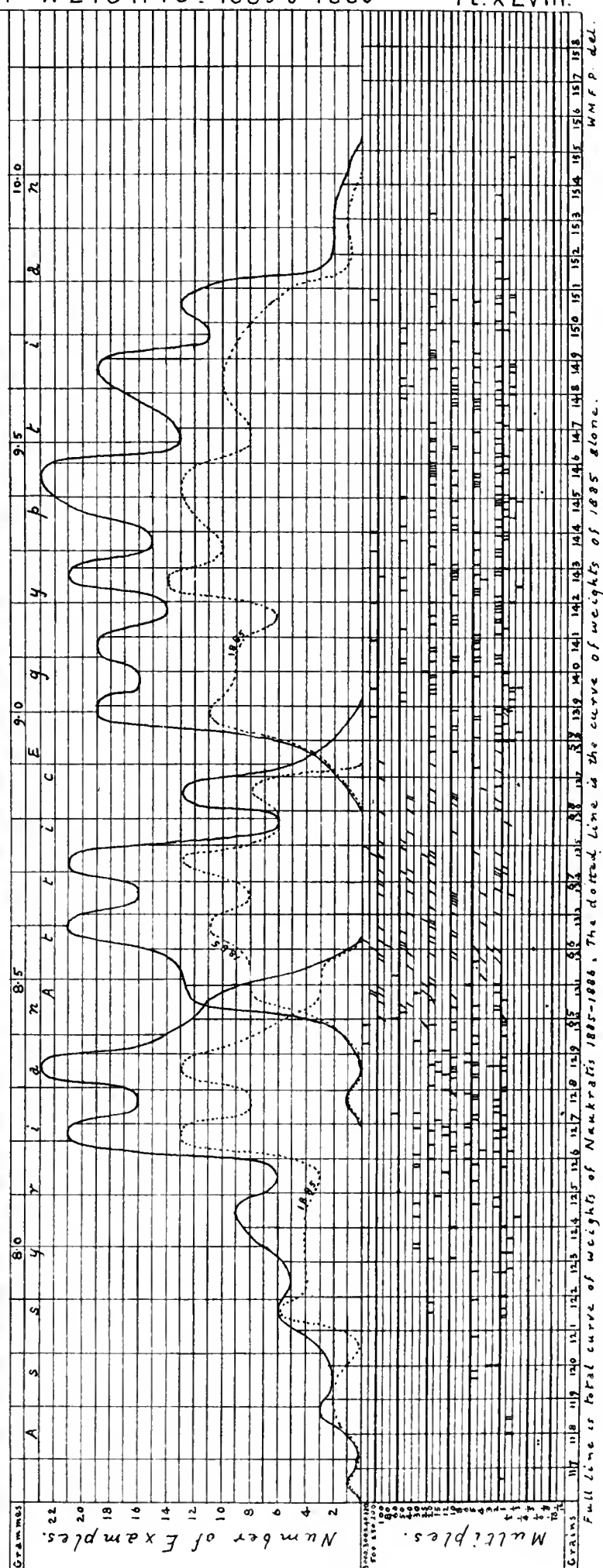
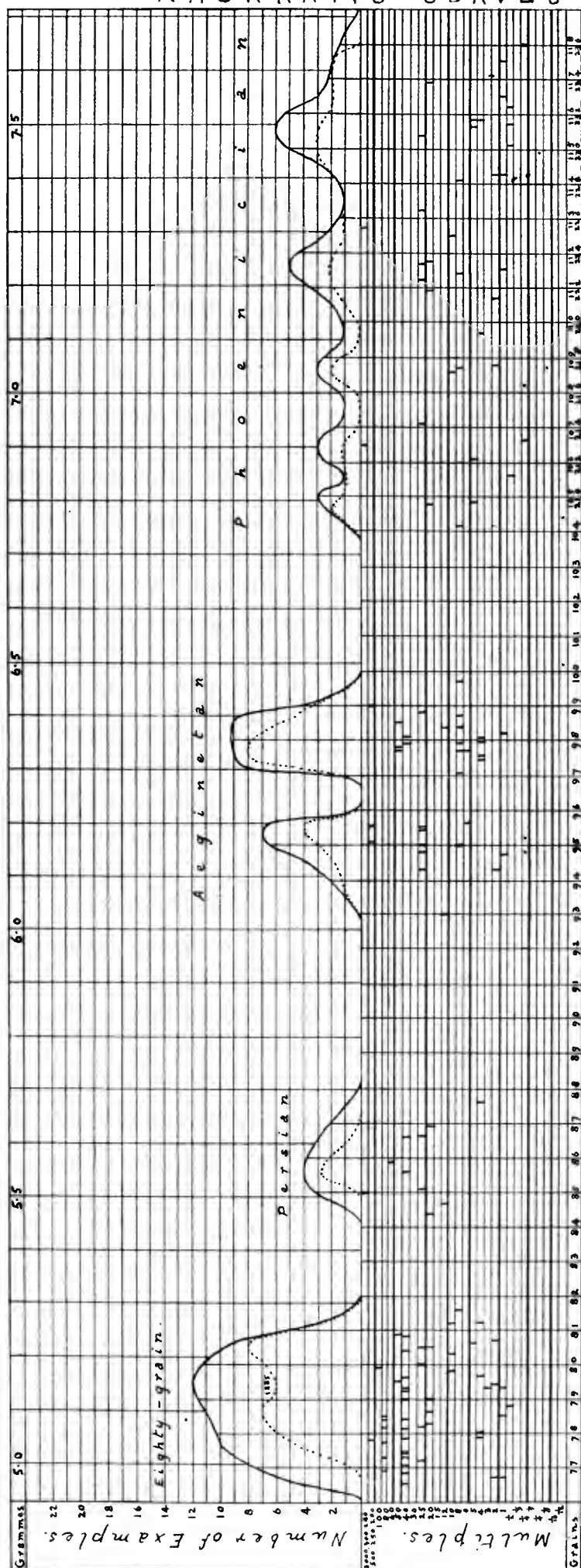
WALLS E. OF THE CAMP
TELL DEFENNEH

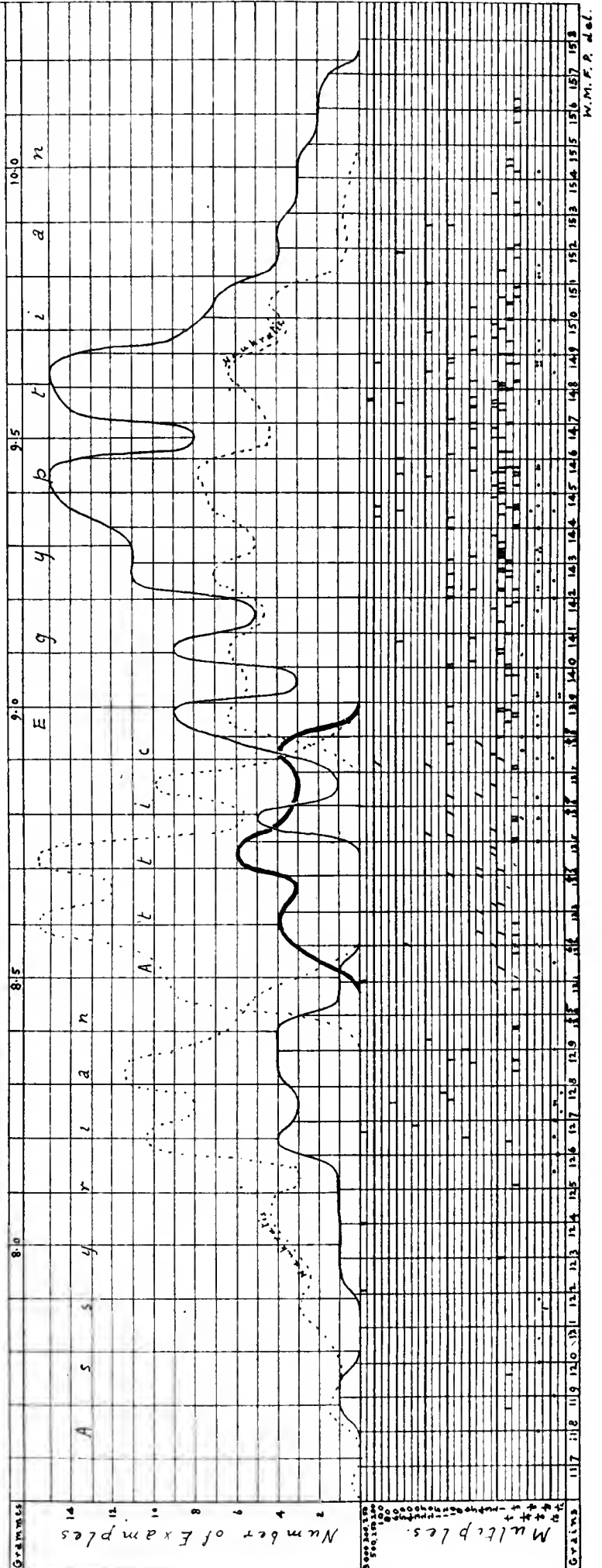
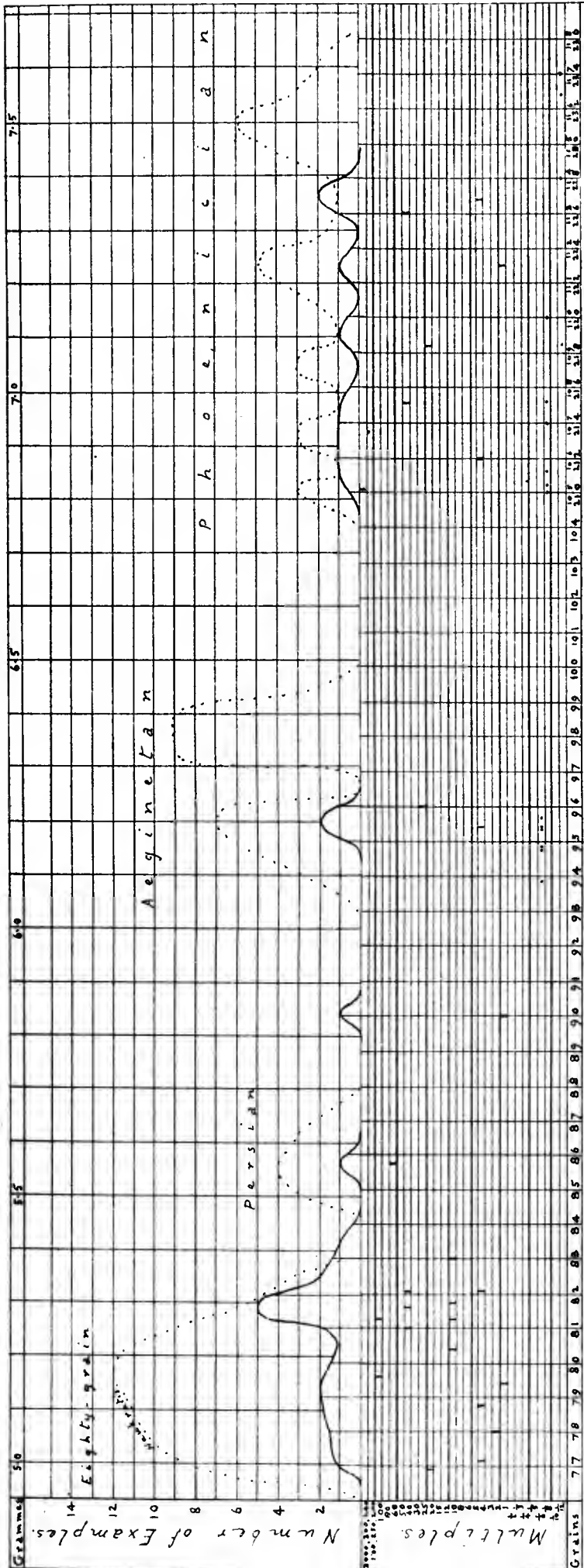
SCALE 1:500

0 50 100 FEET



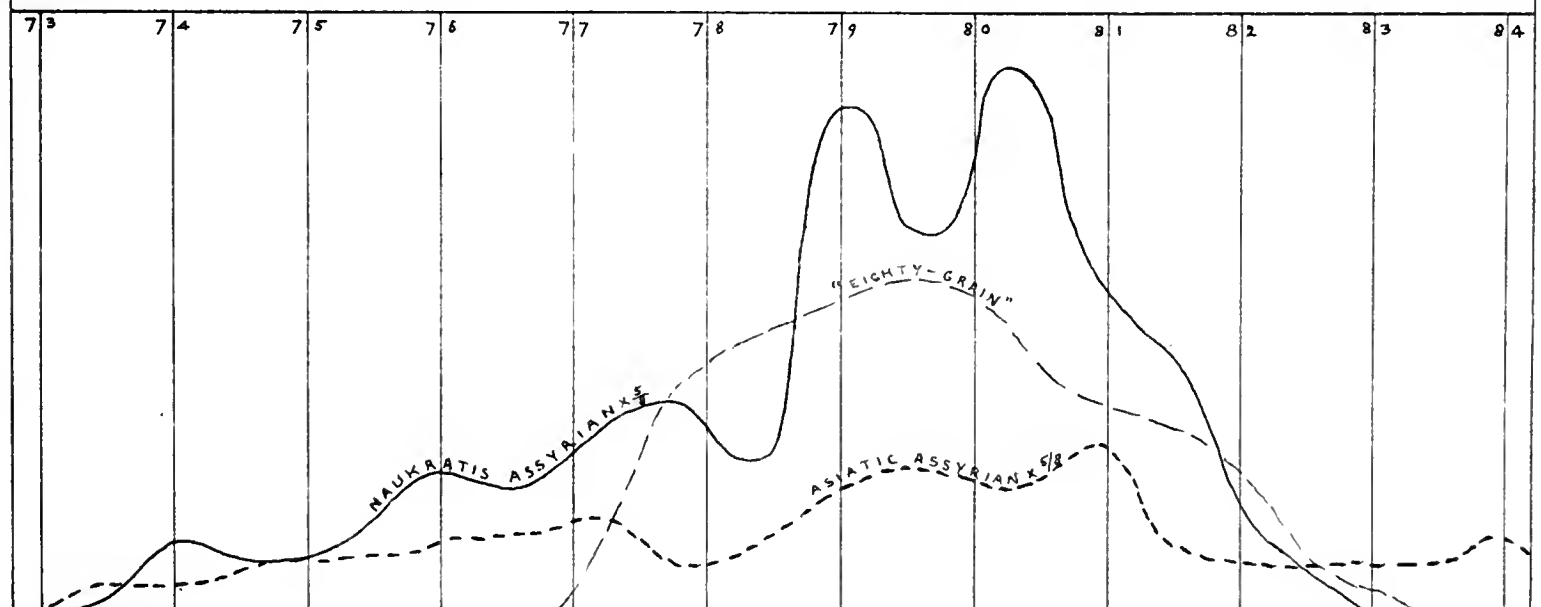
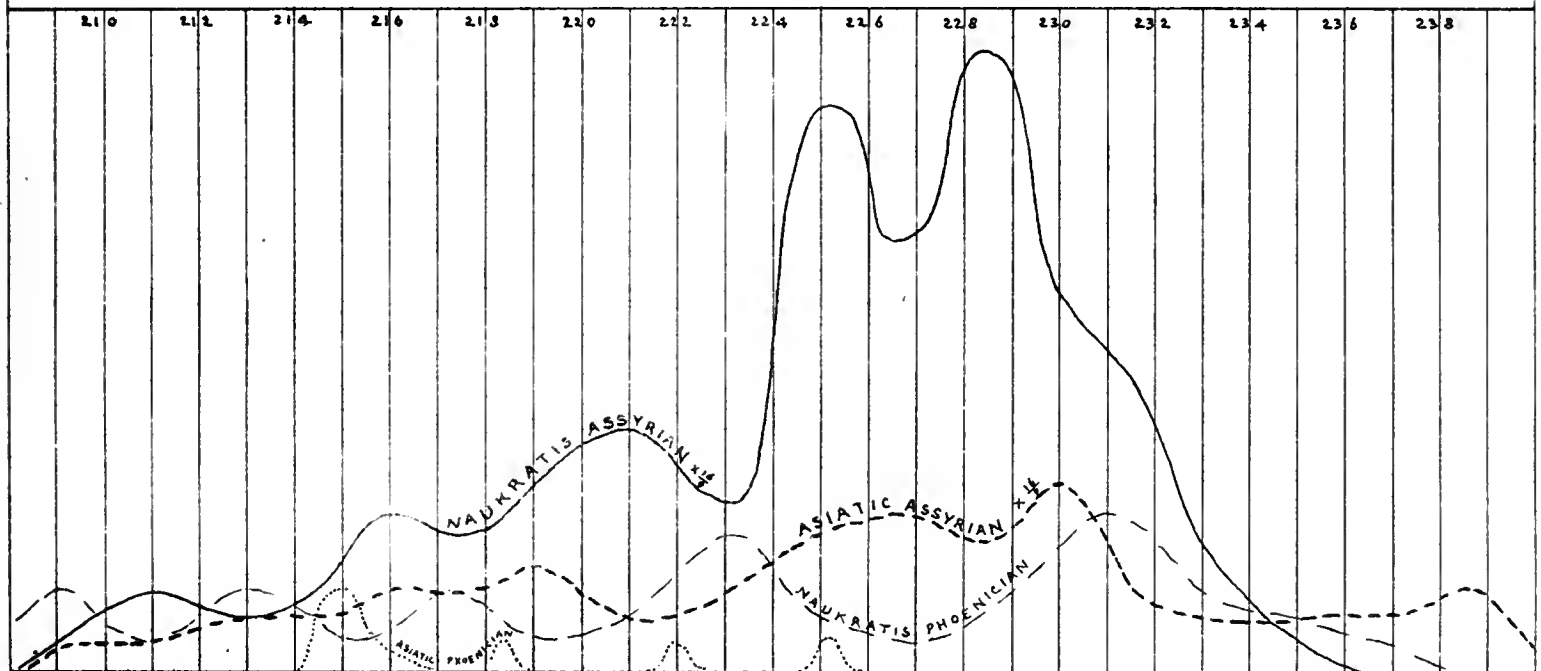
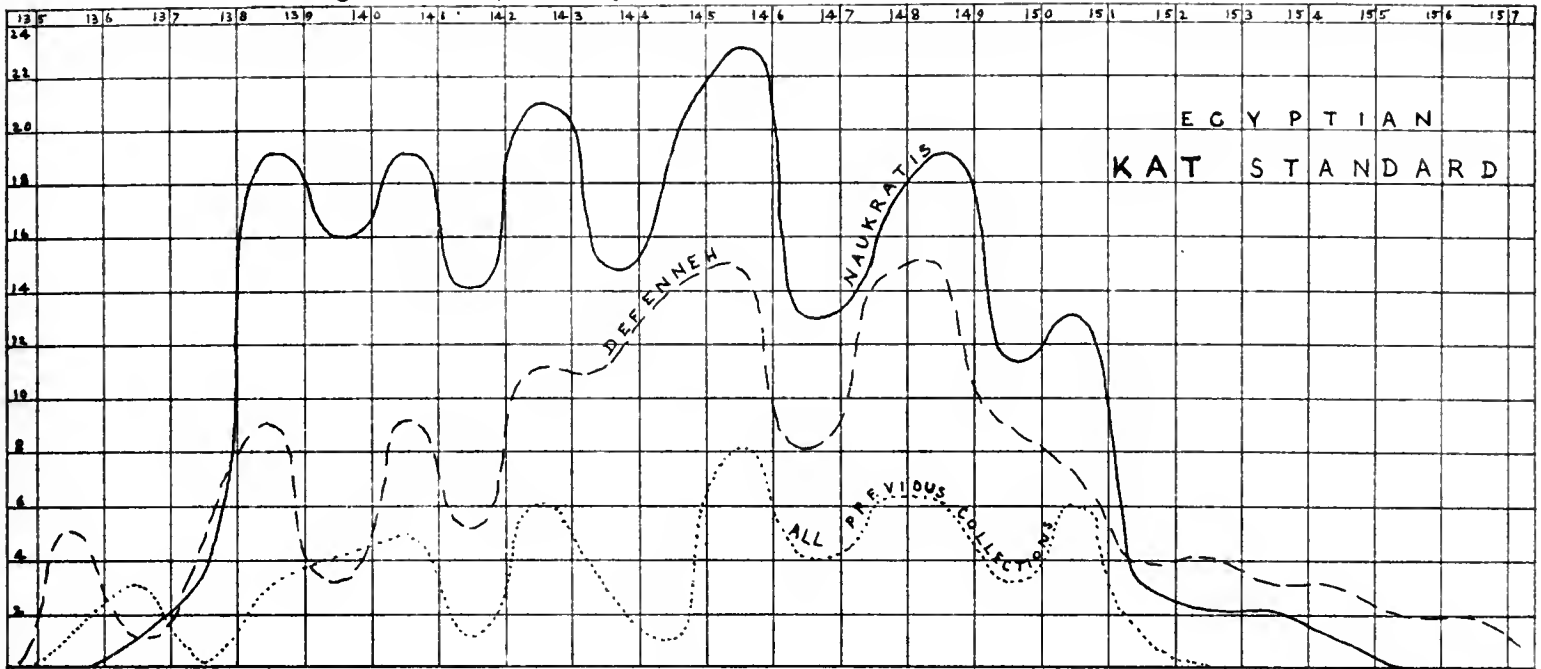




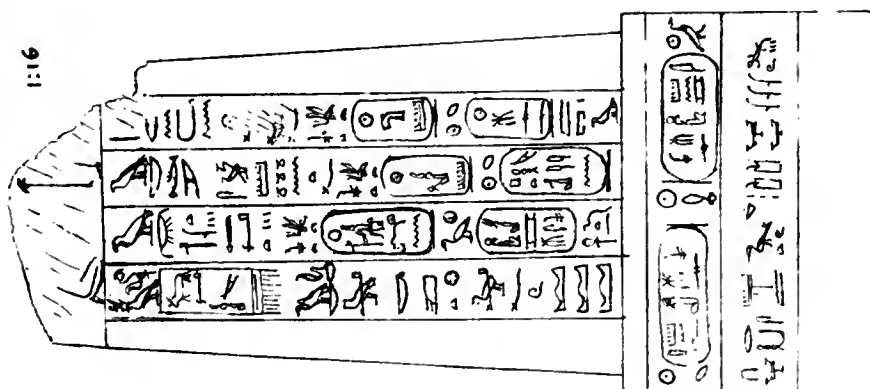


COMPARISONS OF CURVES.

PL. L

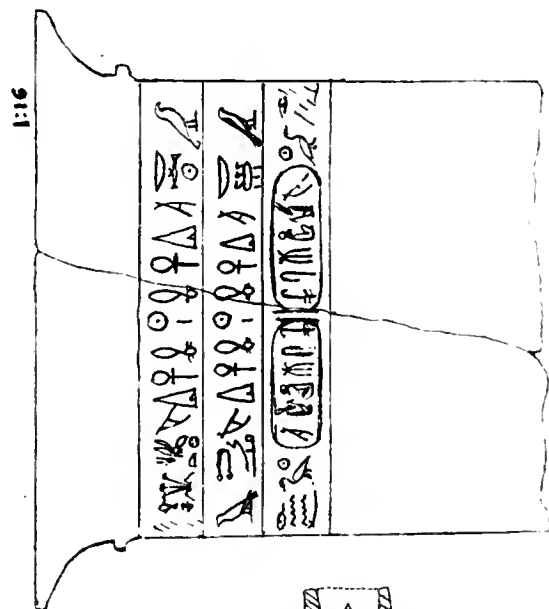


1:16

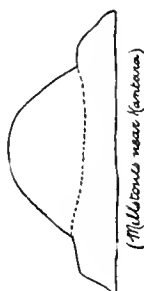
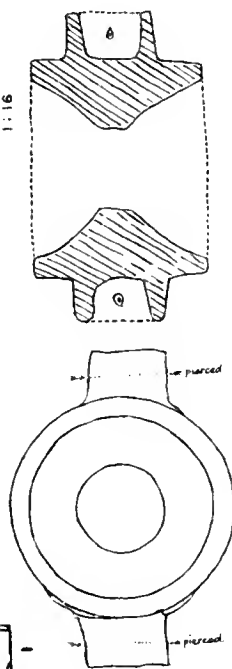


1:16

overleaf
Bulag, S. of Center



1:16

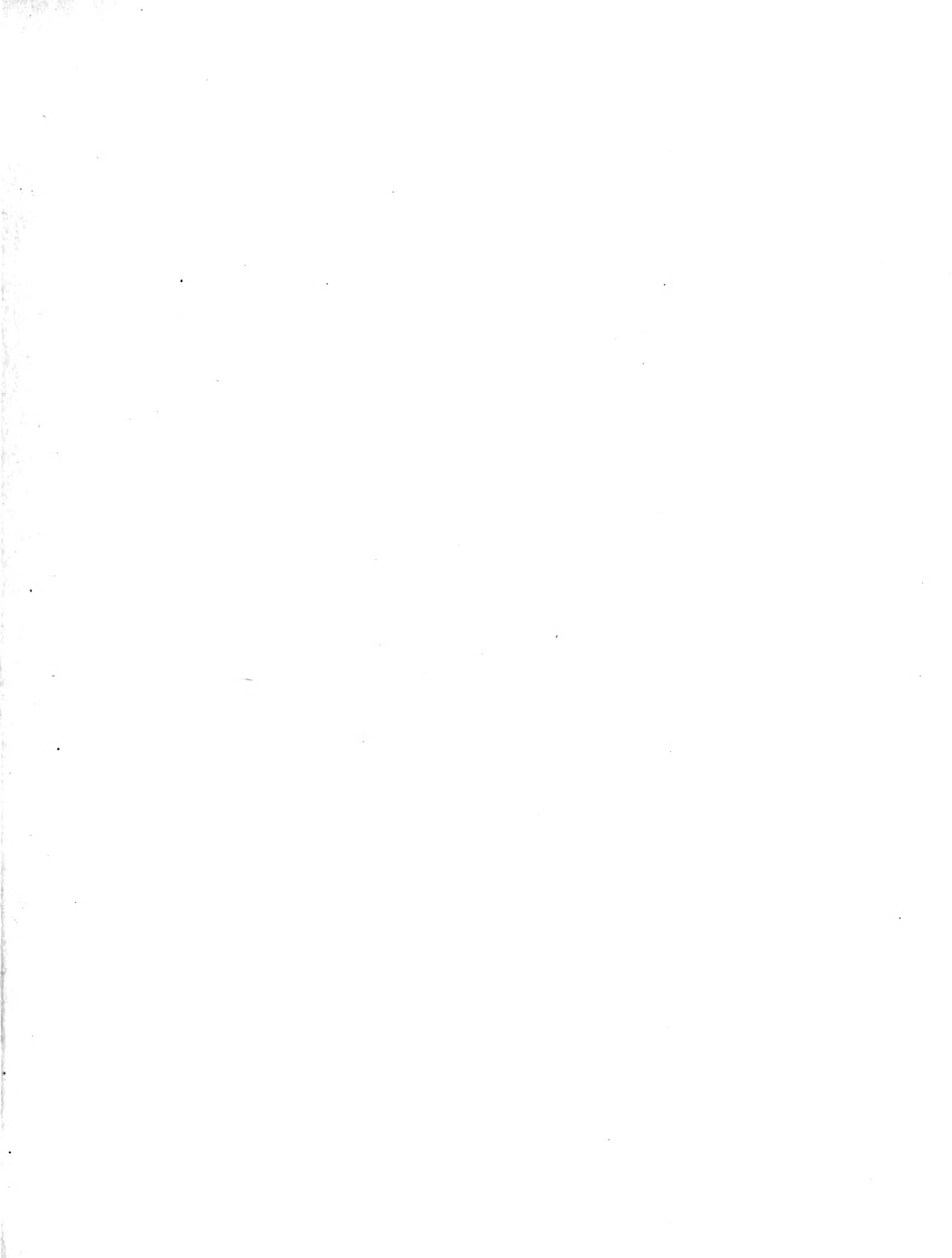


(Mithras nose (ancient))

1:8

IOVI · HERCVLI · VICTORIAE
 IMP · CAESAR · G · M · S · AVRELIVS · VALENTINVS · DIOCLETIANVS
 P · S · FELIX · INVICTVS · AVG · PONT · IFEX · MAX · GERMAN · MAX
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 IMP · CAESAR · MARCVS · VS · AVRELIVS · VALENTINVS · MAXIMIANVS
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